a guide to
NEW YORK ARCHITECTURE 1650-1952
huson jackson
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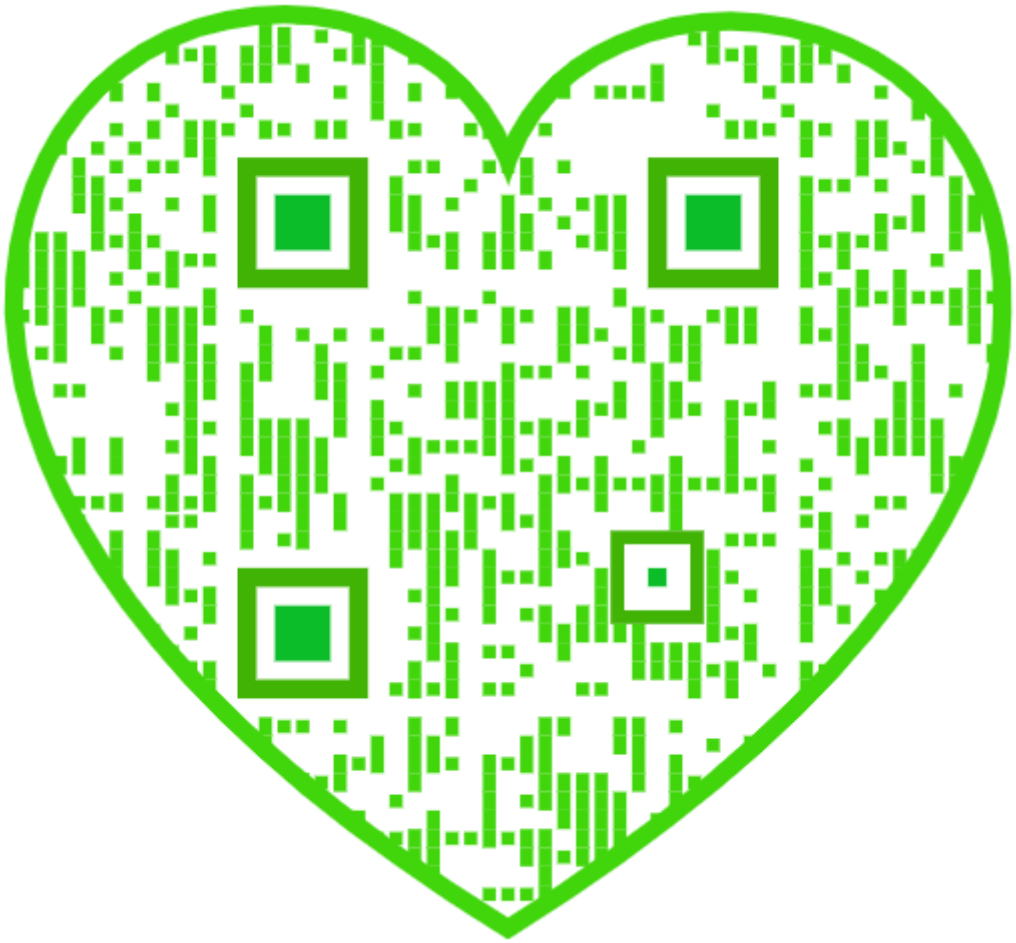

NEW YORK ARCHITECTURE

1650-1952

by Huson Jackson

THE HILLA VON REBAY FOUNDATION
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Huson Jackson A.I.A.

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INTRODUCTION

On the occasion of the 84th Convention of the American Institute of Architects held in New York late in June, 1952, the Reinhold Publishing Corporation decided to bring out this guide to important architecture of metropolitan New York and present it as a welcoming gift to every accredited delegate to the Convention. It seemed a service to list and describe briefly the notable structures built in the various boroughs of the city from its inception up to the time of the Convention — as much as they remain after the ravages of three centuries, of real estate "developments," and thoughtless alterations and removals.

It was discovered, as the project advanced, that a number of professional societies were interested in this subject. The Municipal Art Society already had committees at work, investigating and listing examples of architecture thought historically and esthetically valuable. The New York Chapter, A.I.A., had polled its membership for a list of New York buildings the architectural visitor should see. The Society of Architectural Historians also was interested in documenting notable structures remaining — and the Museum of the City of New York, Avery Architectural Library at Columbia University, and New York Historical Society were ready to aid in authenticating any such documentation. Finally it developed that a grant from the Arnold Brunner Fund administered by the New York Chapter, A.I.A., would be given Huson Jackson, New York architect and Assistant Professor of Architecture, Pratt Institute, to study just this subject. And the Museum of Modern Art was selecting New York buildings for an exhibition during the A.I.A. Convention. So, this book became a possibility through the support, assistance, and encouragement from many sources — and Mr. Jackson consented to serve as author-editor.

We believe that this is an unusual document, in that Mr. Jackson's ability and knowledge together with the aid from so many competent advisers, has made it possible to describe both historic and contemporary architecture —from the Bowne farmhouse in Flushing (1661) to the

new Lever House in Manhattan. It thus constitutes a review of local architectural history since the middle of the Seventeenth Century. That anything old remains to be seen in the New York area is remarkable; that so much has been destroyed is distressing. Perhaps this book will encourage and assist those who are interested in preserving what is left. There are signs of public support, particularly in Richmond, where official interest is matched by local civic pride.

In any event, this book that Huson Jackson has prepared should be a useful guide. The Reinhold Publishing Corporation presents it, through its Architectural Book Division and its magazine, PROGRESSIVE ARCHITECTURE, in the hope that the A.I.A. delegates will find it useful and that others will learn from it something of the lasting values of good architecture.

MUSEUM OF MODERN ART EXHIBITION

The following buildings were selected for showing at the Museum of Modern Art's exhibition, Guide to Modern Architecture in the New York Area, opening June 10, 1952. The numbers refer to the listing and description in the text.

36 United Nations Headquarters
39 Offices for Webb & Knapp, Inc.
47 Fairchild House
50 Lobby, Esso Building
54 Lever House
63 Bonnier's
162 Reid House
163 Friedman House
164 Morris House
166 Johnson House
167 Johansen House
168 Geller House
169 Sharp House
171 Goodyear House
173 Morris Park Housing Development

5. ST. PAUL'S CHAPEL: Lower Manhattan (Gottscho-Schleisner)

MANHATTAN

Unlike various of the other colonies founded in the New World, New York's beginnings were commercial, not religious, in motivation. The phenomenal prosperity of this great commercial venture accounts for most of what is to be seen today.

Development began in the New York region when in 1609 Henry Hudson exploring for the Dutch East India Company sailed into the harbor and up the Hudson River to the head of navigation. Although Hudson was unsuccessful in his search for a passage to the East Indies, the Dutch were quick to realize the value of his discovery. In the years immediately following, the area was visited by numerous explorers and trading posts were established on Manhattan and up-river. Permanent settlement was begun in 1624 by the West India Company founded to exploit this and other Dutch interests in the New World.

The colony prospered immediately. Despite occasional Indian hostilities and continual harassment by the English, the Dutch succeeded, in forty years of possession, in constructing on Manhattan Island the flourishing town of New Amsterdam. Substantial houses of brick or stone were built, also a fortress and a church. A palisade of logs for protection against Indians formed the northern limit of the town and gave Wall Street the name it still bears. The early aspect of this town was decidedly Dutch and somewhat medieval in character. Unfortunately, owing to commercial success and subsequent rebuilding, no single building of Dutch origin remains. By the curious process which causes the voids of the city structure to outlive the solids, the only physical vestiges of New Amsterdam are the narrow irregular streets of lower Manhattan.

The commercial preoccupation of the colonists and of the sponsoring company caused New Amsterdam's defenses to be neglected. The English in 1664 demanded and received the surrender of the town without a struggle. New Amsterdam became New York and, with the exception of its brief repossession by the Dutch ten years later, it remained an English colony until the Revolution.

Prosperity continued under English rule. By the end of the Seventeenth Century, New York was a city of some four thousand population and had begun to push north of Wall Street.

The population was acquiring the diversity which characterizes it to this day. In addition to Dutch and English, there had from early times been French-speaking Huguenots and Walloons among the settlers. The persecution of Louis XIV drove additional French protestants to the city, and Germans, also uprooted by the French king, came from the Palatinate.

The Eighteenth Century was a period of accelerating growth. The architectural aspect of the city was now becoming definitely English. Fine town houses lined Broadway, and evidences of wealth and social display appeared. By 1775 the city had a population of about twenty thousand and extended to Chambers Street on the west side and farther north along Bowery Road on the east side. North of the city stretched Manhattan Island occupied by fine country homes and farms.

Little remains of Colonial New York. The former residential and shopping areas of lower Manhattan have been almost completely obliterated by manufacturing, office and wholesale uses. Only a few churches remain from the Eighteenth Century and a scattering of houses elsewhere.

The Revolution was a period of great severity for New York, which fell to the British in 1776 and remained in their possession until the conclusion of the peace treaty. A large area of the city burned and the population dwindled. The recovery after the British evacuation was phenomenally rapid. The first federal census in 1790 showed New York's population to be thirty-three thousand; ten years later it was over sixty thousand. New York had become the first commercial city of the nation, outdistancing Philadelphia and Boston.

New York's physical growth was so rapid that it became necessary to establish in 1807 a commission to make a comprehensive plan for new streets, roads and public squares. Much of the lower east side and of Greenwich Village, already an established suburb of New York, had by this time been plotted. The Commissioner's report presented in 1811 mapped a grid-iron pattern of broad north-south avenues and numbered cross-town streets beginning with First Street just north of Houston Street and extending to One Hundred and Fifty-fifth Street in Harlem Heights. No countenance was taken of existing roads (even Broadway) and towns, of property divisions or topography. This audacious plan, with modifications from time to time, has determined the growth of central and upper

Manhattan. It is symptomatic of the thinking of the day that the Commissioners deliberately avoided diagonal streets, circles and the like because of the greater economy of building rectangular houses. Similarly they justified leaving so little open space (Central Park was not contemplated in this plan) on the basis of economy because the "price of land is so uncommonly great" and because Manhattan was an island embraced by arms of the sea. Presumably river views were deemed a substitute for gardens and parks. While disavowing any desire to aid what they called the "pernicious spirit of speculation," the Commissioners provided an ample field for speculators to operate in at a furious pace.

In the Nineteenth Century, New York began to grow at an explosive rate. By the 1820's Greenwich Village had ceased to be a suburb and was merely a part of the city. Housing during the first half of the Nineteenth Century was of the attached or row-house type designed initially for single-family occupancy. Toward the middle of the century tenement houses built exclusively for tenant families appeared; the process of overcrowding and slum building was under way. As the older residential areas of the lower city gave way to commerce, fashionable residential areas appeared in the Washington Square neighborhood, Chelsea and Murray Hill. The retail center began to move up Broadway, passing Canal Street in the mid-century and Fourteenth Street by the century's end. One of the city's spectacles was the area of lavish palaces for wealthy merchants and financiers which appeared on upper Fifth Avenue between Thirtieth and Sixtieth Streets in the latter part of the Nineteenth Century. Today this architectural tour de force has disappeared in the changing economy and the continued northern drift of the commercial and shopping areas.

Simultaneously along both the east and west sides of the island for many miles tenements were thrown up. Immigrants were now arriving by the scores of thousands and many found New York with its multi-national background a congenial home. First Ireland and Germany furnished the bulk of the flow, then eastern and southern Europe. The introduction of elevated railroads in the Seventies and their extension to the Harlem River made new areas convenient to the commercial center and accelerated the rate of tenement building. The abnormally

high cost of land continually operated to produce crowded conditions. Manhattan's insular position with its limitation of available space is frequently blamed for the high land values. Yet the high ground cost and consequent sweating of the land were the accepted norm, even when vast tracts of undeveloped acreage were awaiting use.

New York's first tenement house law passed in 1867 and succeeding laws to regulate housing made some slight improvements, but did not effectively check the progress of slum building. Today the municipality is struggling at great expense to eradicate the fruits of this period.

The steady northward migration of shopping and business districts into choice residential areas, together with emergence of the skyscraper in the Nineties led to adoption in 1916 of the city's first zoning ordinance. This law regulates the use to which buildings may be put in various zones, the percentage of the lot which may be covered, and building height in relation to street width. However, the ordinance permits construction on one-quarter of the lot area to be carried to an unlimited height, a provision which allowed the great towers of the Twenties and Thirties to rise.

Traffic congestion has been recognized as a serious problem for more than a hundred years. Streets planned for residential use have proved inadequate when converted to commercial and manufacturing occupancy. Improved transportation above and beneath the street surface has increased the throng of pedestrians to be accommodated. Finally the motor car has added still more to the burden. Among the most spectacular engineering works of recent times have been the highways, parkways, bridges and tunnels designed to make the city function in the Motor Car Age.

MANHATTAN—DOWNTOWN

1 MISSION OF OUR LADY OF THE ROSARY

STATE STREET AT BATTERY PARK
attributed to JOHN McCOMB
c. 1800

An elegant brick house with a curved front and slender wood columns, following the bend in the street. One of the few rem-

nants of the day when lower Broadway was a neighborhood of fine residences.

2 FRAUNCES TAVERN

PEARL AND BROAD STREETS
1719 Museum open daily except Sunday, 9-4

This is probably the earliest residential building remaining in Manhattan. The solid, squarish, four-story brick house was turned into a tavern by Samuel Fraunces in 1762 and figured prominently in the City's life at the time of the Revolution. In 1783 George Washington's farewell to his officers was delivered in the Tavern's Long Room.

During the 19th Century it suffered changes, but it was extensively restored in 1907 under the architectural direction of William H. Merserau. It now contains a restaurant on the ground floor (open for lunch only), a museum of relics of the Revolution on the third floor and a small historical library on the fourth floor.

3 TRINITY CHURCH

BROADWAY AT WALL STREET
architect: RICHARD UPJOHN
1830-46

The first Protestant Episcopal parish to be established in New York (chartered 1697), Trinity is also probably the richest of its denomination. In 1705 Queen Anne granted a tract of land comprising a good portion of lower Manhattan to the parish and it still has extensive real estate holdings. Many of the other Episcopal churches in the city are chapels of Trinity.

The present church replaces one built in 1698, destroyed by the fire of 1776 and later reconstructed. It is a sensitively proportioned building of dark brownstone in English Gothic style. There is a single rectangular tower at the main entrance, surmounted by an octagonal spire.

The interior is treated with great consistency giving it dignity and richness. The groined vaulting is supported by double rows of columns. The Church windows are very large, with glass that is mellow and subdued in color. The furnishings and other elements, that often do so much to destroy the effect of a church design, are quite in harmony here.

4 SUB-TREASURY BUILDING

NORTHEAST CORNER OF WALL AND NASSAU STREETS
architects: ITHIEL TOWN & A. J. DAVIS;
WILLIAM ROSS; JOHN FRAZEE
1834-41 Federal Hall Museum open daily 10 to 4, Saturday, 10 to 1

The site on which this Greek Revival building stands is one of importance in the life of the city and the nation since 1699 when the Colonial City Hall was built there. It was the scene of the trial in 1735 of John Peter Zenger, a landmark in the struggle for a free press, the meeting place of the Stamp Act Congress in 1765 and the Continental Congress in 1785. Major l'Enfant was commissioned to remodel the city hall to serve as the first federal capitol. In 1789 Washington took his first oath as President here. The Federal Hall was torn down in 1812 following completion of the present City Hall.

A competition was held for design of the existing building which was originally the Customs House. Although the exterior follows the winning design of Town and Davis, the interior does not. Timid about the lightness of construction, the commissioners in charge of the job employed Ross to re-study the interior and Frazee to do the working drawings and detailing. It is a dignified building with pedimented entrance porticos front and rear and a raised ground floor permitting the monumental steps appropriate to a Greek facade.

It became the Sub-Treasury in 1862 and until recently was in continuous use by various federal agencies. Now it is in the hands of the Federal Hall Memorial Associates, who intend eventually to make the whole building a museum. At present there is the small museum in the basement containing miscellaneous small objects of historical interest, and the large and impressive central dome room is open to the public.

5 ST. PAUL'S CHAPEL

BROADWAY BETWEEN VESEY AND FULTON STREETS
architect: JAMES McBEAN
1764-6

The oldest church building surviving in Manhattan and one of the most beautiful, St. Paul's has had a prominent place in the life of the city and was the scene of the service conducted after Washington's inauguration in 1789. The interior is light and spacious with side galleries and barrel vaulting on slender columns. The spire on the west tower was added in 1794. The chapel is beautifully maintained.

6. CAST-IRON BUILDING: Lower Manhattan (Gottscho-Schleisner)

6 CAST-IRON BUILDING

NORTHWEST CORNER, WASHINGTON AND MURRAY STREETS
architect: JAMES BOGARDUS
1848

An early example of cast-iron building exterior by the man credited with originating this method of construction. The simple engaged columns permit wide windows admitting more light than it was possible to get in the conventional masonry walled buildings. Behind the cast-iron front, masonry bearing walls and wood joists are used.

7 NEW YORK CITY HALL

CITY HALL PARK
BROADWAY, CHAMBERS STREET, PARK ROW
architects: JOSEPH F. MANGIN & JOHN McCOMB
1803-12

One of the finest public buildings New York possesses, City Hall is an elegant, beautifully detailed and executed structure composed of projecting wings flanking a central element. It is a rather low building of delicate scale but nevertheless has a dignity appropriate to its function. Although strongly influenced by the French Renaissance in detail, it retains much of the feeling of Colonial buildings in its over-all forms. The curving cantilevered stairs of stone are a handsome feature. The commission for the design was won in competition.

The building to the north has not been well studied in its relation to the original building and there is a disturbing discrepancy in scale and detailing. Also the City Hall's skyscraping neighbor, the Municipal Office Building, does it violence.

8 ST. BARNABAS HOUSE

304 MULBERRY STREET
architects: KETCHUM, GINA & SHARP
1947-49

Headquarters for the New York Protestant Episcopal Mission Society, this clearly designed building serves as a temporary Shelter for homeless women and children regardless of race or creed. The various functions are well organized in a T-shaped, four-story scheme with the crossbar of the T as street front, and the rear extension dividing the property into two landscaped courts. The basement contains delivery and storage facilities, laundry, and the main kitchen. On the street floor are the main entrance, lounge, interviewing and fund-raising offices, chaplain's office and the very beautiful chapel. The second floor is occupied by women, the third by school-age boys and girls, and the fourth is devoted to pre-school-age children with a nursery, play porch and roof deck as well as living accommodations.

It is a reinforced concrete structure with exterior walls of buff brick. The columns are set back from the building envelope to permit continuous metal strip windows. The setback at the sidewalk level conceals high windows opening into the basement. See April '50 P/A.

9 BAYARD BUILDING (now known as Condict Building)
65 BLEECKER STREET
architects: ADLER & SULLIVAN
1897-98
This 13-story facade provided Sullivan with the opportunity for the elaborate low-relief ornament in terra cotta and the free cornice design in which he delighted. Unfortunately it lacks the power and originality of his best work.

10 COLONNADE ROW
428-434 LAFAYETTE STREET
architect: A. J. DAVIS
1836
Four houses, considerably altered, remain of a row of colonnaded town houses which was once among the most elegant and successful residential developments in the city. Lafayette Terrace, as it was also known, was one of several such rows built at this time in a pattern familiar to European cities, especially London. The entire group of houses is handled as one building in order to achieve greater unity in city design.

The stories above the main cornice were added at a later date.

GREENWICH VILLAGE ROW HOUSES

The Village is still a well defined neighborhood, mainly residential in character, in spite of the encroachments of industry and commerce. As early as the middle of the Seventeenth Century, when most of Manhattan above Wall Street was still a wilderness, there was a small settlement here. During the Eighteenth Century, it grew as a community of fine estates. The period of great growth began in 1797 with the first of a series of yellow fever plagues. The Village was a popular refuge from these plagues which occurred in New York every few years thereafter until 1822. The population continued to increase rapidly until 1850. Surviving row houses are largely of the early Nineteenth Century. Most of them conform closely in plan although the treatment of doorway and interior details changed over the years. They are of brick, built on narrow lots, have a high basement and a stoop leading to the first-floor main entrance. The earlier houses had dormered top stories but many of the dormers were later removed and the roofs raised to gain an extra half-story or story and a half.

Many of the stoops also disappeared when the one-family houses were converted to small apartments. After 1850 the Village remained relatively quiet as the city grew northward, until successive waves of immigrants began moving in at the end of the century. With the immigrants came tenement buildings and in recent years many large apartment houses have appeared; these developments have done much to destroy the homogeneity of the area.

Aside from the houses described below, the following streets should be mentioned as having retained a good deal of their original quality and pleasant scale:

Tenth, Eleventh and Twelfth Streets between Fifth and Sixth Avenues, St. Luke's Place (Leroy Street) between Hudson Street and Bedford Street, Bank Street between Greenwich Avenue and West 4th Street, Vandam Street between Varick Street and Sixth Avenue.

11 23-29, 37 CHARLTON ST. and 48-50 KING ST.
BETWEEN VARICK STREET AND SIXTH AVENUE
c. 1820

Built by John Jacob Astor, these attractive houses occupy the site of Aaron Burr's estate, "Richmond Hill". The simply designed doorways are of an earlier type than the Greek Revival entrances found throughout the Village.

12 SULLIVAN-MACDOUGAL GARDENS
ON SULLIVAN AND MACDOUGAL STREETS
BETWEEN BLEECKER STREET AND WEST HOUSTON STREET
c. 1815

This group of old houses on two adjacent streets is an excellent (unfortunately rare) illustration of one way the urban quality and livability of older houses and neighborhoods may be preserved through private initiative. The houses were bought and remodeled in the early 1920's by a foundation formed by several prominent citizens with the intention of providing medium-rental apartments for professional people. Funds ran out before the property on the Bleecker and Houston Streets ends of the block could be acquired. About 1923 the houses were sold to individuals and most of them are still owner-occupied. A common garden has been provided, carved from the separate rear yards of the two rows of houses, and a small private garden is retained for each house. The characteristic raised stoops have been removed and entrances arranged in the high basement stories.

13 4-10 GROVE STREET

c. 1820

These small houses of two stories and attic with dormer windows are characteristic early 19th Century New York houses of the type built before the sudden emergence of Greek Revival forms in the early 1830's. They present a uniform appearance, domestic in scale, and quite simple except for the typical enriched entrance doors. The kitchen was commonly located in the partially raised basement floor.

Grove Court, entered through a gateway between 10 and 12 Grove Street, is a group of small houses of later date built in the center of the block.

14 OLD MERCHANT'S HOUSE

29 EAST 4th STREET

attributed to: MINARD LAFEVER

1832 Open to the public weekdays, 11 to 5, Sundays, 1 to 5

One of a row of large houses built on speculation, this house remains in a unique state of preservation. It was bought by Seabury Tredwell in 1835 and was occupied by his family until the last surviving daughter died in 1933 at the age of 92. A relative then formed a society to maintain the house as a museum. All the original furnishings are intact, including carpeting, curtains, pictures, as well as furniture.

15 21-25 WASHINGTON SQUARE NORTH

architect: MARTIN THOMPSON

1830

At a time when the ideas of the Greek Revival were triumphing in New York, this street was developed as part of a luxurious residential area. The land was not sold but leased for 99 years. The land owners gave Martin Thompson control of the facades of all the houses to assure a harmonious row, but individual leaseholders were free to employ their own architects.

The facades of the houses east of Fifth Avenue have been altered in the top floor when remodeled into an apartment project but remain intact in the lower floors. The low red brick portion of the building on the west side of Fifth Avenue is the result of a futile neighborhood battle to "preserve the character of the Square." Other houses west of Fifth Avenue (Nos. 21-25) remain substantially unchanged in exterior appearance. Former stables in the alleys behind the houses have been converted to studios and residences (MacDougal Alley and Washington Mews).

15. WASHINGTON SQUARE HOUSES: Lower Manhattan (Gottscho-Schleisner)

16 9-15 GAY STREET

BETWEEN CHRISTOPHER STREET AND WAVERLY PLACE
c. 1820

These small, modest houses, are appropriately located on one of the neighborhood's smallest streets, narrow, crooked and just one block long. They are of white-painted brick and have the dormers and Georgian fanlights characteristic of the early date. Around the corner, on Christopher Street, there are a few similar houses probably built about the same time.

17 RHINELANDER GARDENS

112-124 WEST 11th STREET
architect: JAMES RENWICK
c. 1850

The houses are unusual for their multi-story balconies supported on cast-iron tracery of more or less Gothic style. Otherwise the detail follows the form common to the time.

The extraordinarily deep lots which permitted this row to be set back from the street in shady front yards is essentially the fortunate result of an accident in city planning occurring where the earlier street pattern of Greenwich Village intersects the gridiron of upper Manhattan.

Other results of this unusually deep block are to be seen in Patchin Place (entered from West 10th Street) and Milligan Place (entered from Sixth Avenue), where small houses have been crowded into the interior spaces.

18 WASHINGTON SQUARE

FOURTH STREET TO WAVERLY PLACE
MACDOUGAL STREET TO UNIVERSITY PLACE
1823

Washington Square began its service to the city as potter's field and public execution ground. In 1823 it became a parade ground and public park and shortly thereafter houses were built around its perimeter. (See description 15.) New York University built its first building on the east side of the Square, a site it still occupies.

The Square, like other public open spaces in the city, has suffered from too intensive usage. It serves as playing field and park for far too much of the surrounding residential area; tall apartment houses and hotels have risen, particularly on the west, and may eventually crowd out all the old town houses; and New York University is extending its downtown campus to the other sides of the Square.

19 ST. LUKE'S CHAPEL

HUDSON AND GROVE STREETS
1822

This simple low brick church was first known as St. Lukes-in-the-Fields. It occupies the center of an entire block of houses of early date, forming a pleasant oasis in a neighborhood encroached upon by industry and heavy trucking.

The Chapel has been altered several times: it was enlarged and made cross-shaped in the 1840's; chancel and chapels were added in 1923.

20 STUDIO BUILDING

51 WEST 10th STREET
architect: RICHARD MORRIS HUNT
1857

This is the city's first building designed specifically for artists' studios and is cooperatively owned by the occupants. The architect was one of the first important Americans trained in l'Ecole des Beaux Arts and responsible for implanting eclecticism here.

21 CHURCH OF THE ASCENSION

FIFTH AVENUE AND 10th STREET
architect: RICHARD UPJOHN
1841

A brownstone Gothic Revival church built by the architect of Trinity Church. It was redecorated about 1888 by Stanford White. The altar mural is by John La Farge.

22 JOHN WANAMAKER—NORTH BUILDING

(FORMERLY A. T. STEWART STORE)
BROADWAY TO FOURTH AVENUE, 9th STREET TO 10th STREET
architect: JOHN KELLUM
1862

This five-story department store occupying a full block is one of the early examples of the type of retailing institution which emerged in the middle of the 19th century. The large store windows were a remarkable feat for this day. The building has a large skylighted open well in the center, a feature more often found in European than American department stores. The outer walls and interior columns were prefabricated of cast iron, a typical construction of this period and a precursor of modern skeleton construction.

The south Wanamaker building designed by Burnham and Company and built in 1905 does not show the originality of Burnham's best Chicago work.

23. GRACE CHURCH: (Gottscho-Schleisner)

23 GRACE CHURCH

BROADWAY AND 10th STREET
architect: JAMES RENWICK
1845-6

The delicately designed church with its tall spire over the entry is one of the first examples in America of Gothic Revival work based on the elaborate late English style. In common with similar work of its time, its vaulting is lath and plaster. Together with Upjohn's Trinity Church, it was responsible for the great popularity of the Gothic style for churches which lasted for generations.

The church has been handsomely located in relation to its site to form a focal point when approached from the south on Broadway.

Renwick won a competition for the design of the church, as a twenty-three year old engineer working on the city reservoir. His subsequent practice included many other churches, among them St. Patrick's Cathedral.

24 ST. MARK'S IN-THE-BOUWERIE

SECOND AVENUE AND 10th STREET
1795-99

This small stone church of beautiful scale and proportions is on the site of a Dutch chapel built in 1660 on the farm of Governor Stuyvesant. The steeple and portico were added in 1829 and 1853, respectively, but are quite in harmony with the rest of the structure. The diagonal position of the church on its tree-shaded plot, which adds so much to its charm, is one of the two remaining traces of an earlier street pattern, the other being nearby Stuyvesant Place.

25 NEW SCHOOL FOR SOCIAL RESEARCH

66 WEST 12th STREET
architect: JOSEPH URBAN
1931

This school building specifically designed for an adult education institution is an early example of modern design in New York. It presents a striking cantilevered facade of emphasized horizontal bands of brick and windows, but the interiors lack the sense of openness which characterizes most modern work.

The building has murals by Thomas Benton and Camilo Egas and frescoes by Orozco.

26 FRIENDS MEETING HOUSE AND SEMINARY

RUTHERFORD PLACE
BETWEEN 15th AND 16th STREETS (STUYVESANT SQUARE)
c. 1860

The setting of trees, space and quiet around the small two-story connecting buildings makes them seem quite remote from the crowding of the City. They are extremely simple, with beautiful scale and proportions. The red brick, gray sandstone lintels and white painted wooden porches with slender Doric columns have a total effect more suggestive of the early post-Colonial period than the later Greek Revival.

27 GRAMERCY PARK

20th TO 21st STREETS BETWEEN
THIRD AND FOURTH AVENUES
1831

Successful in its attempt to attract the wealthy by guaranteeing the exclusive use of a private park, this little square is still restricted to the owners and tenants of the buildings surrounding it. The north and east sides are occupied entirely by large apartment houses and hotels now, but some houses remain on the south and west and some of the tranquil atmosphere can still be felt.

Numbers 1, 2, 3 and 4 on the west side, designed by A. J. Davis, were built about 1840. They are large and gracious brick row houses similar to those of Washington Square but distinguished by lacy wrought-iron balconies.

MANHATTAN — MIDTOWN

28 STARRETT-LEHIGH BUILDING

26th TO 27th STREETS, ELEVENTH TO THIRTEENTH AVENUES
architects: RUSSELL G. & WALTER M. CORY
associate architect: YATSUO MATSUI
1931

One of the most ambitious efforts ever made to solve the problem of distribution of freight in the midst of city congestion. The ground floor is a freight terminal with railway tracks, driveways and loading platforms for trucks. There are special elevators to carry the trucks to the upper floors which house facilities for storage, repacking, distribution, manufacture and display of goods.

29 BIGELOW-SANFORD SHOWROOM

140 MADISON AVENUE
designed by: DONALD DESKEY, ASSOCIATES
associate architect: RALPH GULLEY
1948

Luxury is a dominant characteristic in the display areas of this wholesale carpeting company but it is achieved without undue acrobatics or the sacrifice of design integrity. Rich materials, fine furniture and of course thick carpeting are used lavishly. A system of ceiling tracks and sockets provides great flexibility for changing exhibits. The three standard types of display racks, made of pipe and wire, used in the showroom are also sold to Bigelow dealers in other cities.

30 NEW YORK UNIVERSITY-BELLEVUE MEDICAL CENTER

FIRST AVENUE BETWEEN 30th AND 34th STREETS
architects: SKIDMORE, OWINGS & MERRILL
1951

The only unit of the Center yet completed is the four-story Institute of Rehabilitation and University Clinic at the north end of the 11 acre site. Three other major elements are planned: a 600 bed University Hospital, College of Medicine, and Residence Hall. The present building is a handsome and sensitive one: white brick, orderly fenestration and clean handling of the roof structure make this a visual relief in an otherwise drab hospital area. See May '49 P/A.

31 EMPIRE STATE BUILDING

FIFTH AVENUE AND 34th STREET
architects: SHREVE LAMB & HARMON
1929-31

Observatories on 86th and 102nd floors; open 9:45 to 11:45 daily and Sundays

The tallest of all office buildings can house on its two acres approximately 20,000 workers, who must daily fight their way from and to their homes. Competitive capitalism has here been carried to the point of diminishing returns: much floor area must be unproductively employed for vertical circulation. It is not likely that future office buildings will challenge the height supremacy of this monument to the boom years of the 1920's.

32 MORGAN LIBRARY

33 EAST 36th STREET
architects: McKIM, MEAD & WHITE
1913

Open Mondays to Fridays, 9:30 to 5

A white marble Italian Renaissance pavilion built to house one of the most luxurious private museums in the world. It is a one-story structure with windowless walls chastely decorated with classic motifs. The interiors are extremely ornate. The large exhibition rooms are dimly lit by skylights which occupy only a small portion of the elaborately decorated ceilings.
The annex at 29 East 36th Street was designed by Benjamin Wistar Morris and built in 1928.

33 McGRAW-HILL BUILDING

330 WEST 42nd STREET
architects: RAYMOND M. HOOD, GODLEY & FOUILHOUX
1931

In contrast with the Daily News Building's verticality, Hood seeks in this office and printing building to emphasize horizon-

tality. The windows are grouped between columns, and alternate with bands of glazed tile spandrels. In total effect achieved the building expresses both the horizontal and vertical of cage construction.

34 GRAND CENTRAL TERMINAL

42nd STREET AND PARK AVENUE
architects: WARREN & WETMORE, REED & STEM
1913

The eclectic Classic style popular following the Columbian exposition of 1893 has not prevented the architects of this station from solving most ingeniously an exceedingly complicated problem. Sixty-seven tracks are accommodated on two levels. The main concourse is depressed to the level of the upper tier of tracks and approached by ramps from the sidewalk. Beneath is another concourse serving tracks for local trains. The fanning system of tracks extends for blocks under the buildings on Park Avenue north of the station and under the street itself.

Park Avenue, which the building straddles is kept as a through street by means of an automobile ramp which lifts cars to the second-story level and deposits them again on street level at 46th Street after passing through openings in the New York Central Office Building.

35 DAILY NEWS BUILDING

220 EAST 42nd STREET
architects: JOHN M. HOWELLS & RAYMOND M. HOOD
1930

Guide service daily

An important forward step in the search for suitable form for the tall office building by architects who only a short time previously were designing skyscrapers of Woolworth Gothic. The massing and the silhouette are asymmetrical, almost picturesque. Verticality is exaggerated by the vertical bands of white brick between the windows, every second band containing a steel column. The spandrels are of dark brick and together with the dark of the windows form vertical bands alternating with the white. The roof structures (penthouses, tanks, etc.) are concealed behind walls projected up for several story heights above the top useful floor and treated to resemble the floors below.

36. UNITED NATIONS HEADQUARTERS: Midtown Manhattan (Gottscho-Schleisner)

36 UNITED NATIONS HEADQUARTERS

42nd STREET TO 48th STREET, FIRST AVENUE TO EAST RIVER
architects: United Nations Planning Staff, WALLACE K. HARRISON, Director; MAX ABRAMOVITZ, Deputy Director; and others (see text below)
1947-1952

After a long search for a suitable site in the environs of New York, the United Nations accepted the offer of John D. Rocke-

feller, Jr., of some six city blocks along the East River. An international panel of ten architects participated in the preliminary planning and drew up a plan which served as a general guide for the executed design by the United Nations Planning Staff under Wallace Harrison.

The building group consists of three attached units: the Secretariat, the Council Chambers and the Assembly Building. The Secretariat Building takes the form of a slender 40-story tower without setbacks, faced with glass on the east and west sides and marble on the north and south sides. Attached to the Secretariat on the river side is a four-story building housing three large chambers for the Security, Trusteeship and Economic and Social Councils and beneath them three large committee rooms. Lounges and restaurants are also included in this building. Projecting north and west of the Secretariat and Council Chambers is a large wing of elaborate form housing the assembly chamber.

A number of changes in adjacent streets have been made: the East River Drive has been depressed to pass under the terraced U. N. grounds, and First Avenue will also pass the site in an underpass.

The initial design was the work of an international committee consisting of N. D. Bassov (U. S. S. R.), Gaston Brunfaut (Belgium), Le Corbusier (France), Ernest Cormier (Canada), Ssu-Ch'eng Liang (China), Sven Markelius (Sweden), Oscar Niemeyer (Brasil), Howard Robertson (United Kingdom), G. A. Soilleux (Australia), and Julio Vilamajo (Uruguay).
See June '50 P/A.

37 FLORSHEIM SHOE STORE

FIFTH AVENUE AND 43rd STREET
architects: KETCHUM, GINA & SHARP
1946

Here the idea of the open front is pushed to an extreme, the whole corner shop being treated as a display case. The walls on the two street sides are entirely of plate glass. Small showcases are placed near the glass on the interior. On the Fifth Avenue side there is a deep slanted setback sheltering the entrance and providing an off-street window-shopping area. Every element in the design has been carefully studied, with most satisfactory results, although one might question the

advisability of presenting quite such an unobstructed view of the shoe-fitting area. This is an early instance of the use of an over-all louvered ceiling concealing lighting fixtures.

38 CHILDREN'S AID SOCIETY BUILDING

150 EAST 45th STREET
architects: GIBBONS & HEIDTMANN
1950

It is an agreeable surprise to come across a small, well designed three-story building of decidedly non-commercial character in the midst of the crowded midtown business area. This modest structure on a 75′ x 100′ lot, accommodates a complexity of facilities including the health, dental, foster care and home-maker services of the Society. One of the most prominent features of the scheme is the landscaped interior courtyard, visible from the street through the glass walls of the waiting room. All the rooms used by children and the other most important rooms face this garden.

The solid exterior walls are a smooth, dense, red brick, the spandrels are gray brick cavity walls and the first-story walls are green glazed terra cotta. All the exterior metal is aluminum, structural lintels as well as sash and trim.

39 OFFICES FOR WEBB & KNAPP, INC.

383 MADISON AVENUE
designed by: Architectural Division of WEBB & KNAPP, INC.;
I. M. PEI, Director
Associate Architect, WILLIAM LESCAZE
1951

Permission to visit by appointment

An extraordinarily successful real estate development firm, with full appreciation of the value of creative architectural design, has remodeled a penthouse for its new headquarters. The design is imaginative yet restrained; spaciousness and fine materials have been used to create an almost unbelievable atmosphere of luxury which dramatically reflects the nature of the organization.

The southwest corner of the floor is a large freely-planned space opening through large fixed-glass windows to a land-scaped roof terrace. Floating in this space is a wood paneled circular enclosure of the president's private office, lit from above. A circular elevator penetrates the space to connect with a private lounge and dining room on the roof above.

Executive offices line a broad sound-conditioned corridor in which secretaries' quarters are located. The furniture, including office desks and storage units, was designed by the architect.

40 VICTORIA THEATER
BROADWAY AND 46th STREET
architect: EDWARD D. STONE
1949

In its boldly scaled exterior and entrance this long-run movie house converted from a legitimate theater is in competition with its boisterous neighbors on their own terms. The auditorium, however, is unusual, in the Times Square area, for its restraint and is remarkable also for its strange shimmering quality. To hide the altering and patching, done in plain cinder block, the walls are covered floor to ceiling with aluminum mesh curtains clipped to metal tape and applied to wood blocking. There is a sculpture by Gwen Lux on each side wall.

See May '50 P/A.

CONTEMPORARY TOWN HOUSES

Since 1934, when William Lescaze built his house, a number of other town houses of contemporary character have appeared in the east midtown area. Most are alterations of existing houses, frequently quite thoroughgoing. A few are one-family residences but most contain offices and one or more living units. All, however, are in the tradition of the standard row house, being built within the confines of the narrow city lot and generally not more than four stories in height.

41 211 EAST 48th STREET
architect: WILLIAM LESCAZE
1934

The architect's own house and one of the first modern city houses built in the United States. Most of the openings on the street side are of glass brick used as protection against noise, sun and dirt, and to screen the street view. The treatment of the entrances and detailing now appear rather mannered. Mr. Lescaze's office is on the ground floor, his residence on the upper three floors with the living room occupying the whole top floor.

The house next door is also by Lescaze.

42 212 EAST 49th STREET
architect: MICHAEL M. HARE
associates: LIVINGSTON ELDER, JOHN MANZER, CLEMENT HURD
1938
A sober, straightforward house carefully designed to harmonize with its neighbors. An ingenious scissors stairway provides access to the 4th floor apartment without entering triplex on the lower floors.

43 219 EAST 49th STREET
architect: MORRIS SANDERS
1935
Built for the late architect's office and home, the house also contains a rental duplex. A dark, glazed brick was used to withstand the sooty atmosphere. The windows of the living room floors and the first floor drafting room are deeply recessed for sun protection.

44 254 EAST 49th STREET
architect: RONALD ALLWORK
1947
A simple but roughly detailed facade using obscure glass as an alternative to the glass block of the earlier houses. The building is occupied by the architect's own office and residence.

45 256 EAST 49th STREET
architect: MORRIS LAPIDUS
1946
A bold frame surrounding a grid of obscure glass panels makes a dramatic but superficial street front. Mr. Lapidus' office occupies the lower floors.

46 242 EAST 52nd STREET
designed by: PHILIP C. JOHNSON
1950
The restrained facade treatment of steel shapes, glass and brick conceals a spacious and almost completely open ground floor. Across a small garden pool is a bedroom occupying a separate building at the rear of the lot. Additional bedrooms are on the second floor. Although technically a remodeling job, virtually nothing of the original buildings remains except the party walls.

47 17 EAST 65th STREET

architects: WILLIAM HAMBY & GEORGE NELSON
1942 Not shown to the public

Unfortunately the very ingenious scheme of this luxurious town house can barely be sensed from the street view. The building is split into two sections, placed on the front and the back of the lot, with glass-enclosed connecting ramps and a garden between. The exterior at the street level consists mainly of a wood-and-glass grill with only the main entrance door meant to be apparent; two other doors and several windows are camouflaged in the grillwork. The second and third stories, which overhang the street floor a few feet, have south windows extending almost the full width of the house, shaded with motor-operated wood louvers.

48 235 EAST 72nd STREET

architects: WALTER SANDERS & JOHN BRECK
associate: THEODORE SMITH-MILLER
1938

An honest and ingenious remodeling to provide a ground floor office and three single-floor apartments. The handsome facade alternates horizontally corrugated aluminum with 14-foot-wide unobstructed window openings, fitted with folding accordian sash which slide to either side. The apartment plans, though very compact, are spacious and open.

49 ROCKEFELLER CENTER

FIFTH TO SIXTH AVENUES, 48th STREET to 51st STREET
architects: REINHARD & HOFMEISTER, CORBETT,
HARRISON & MACMURRAY, HOOD & FOUILHOUX
1931-37 Conducted Tours every 10 or 15 minutes.
Observation Promenade, 70th Floor, R.C.A. Building, 9 to 10:30 daily

The advantages of coordinated planning are well illustrated in Rockefeller Center, largest business group in the world. The site is an area of twelve acres leased by John D. Rockefeller, Jr., from Columbia University which holds it in single ownership. On account of the large area planned as a unit, the slablike R.C.A. Building rises in the center of the group to great height without the usual setbacks required by zoning law. Air and light for all is assured by the spacing of high and low buildings. An underground concourse joining all units and the subway helps to reduce street-level congestion. Off-street servicing is provided by a truck ramp to an underground area.

Although not generous with open space, the project is unprecedented in New York for dedicating two of its twelve acres to use as pedestrian promenade, a sunken plaza and a private street (Rockefeller Plaza between 48th and 51st Streets).
In addition to offices the group includes a garage, two theaters, radio broadcasting studios and many shops and restaurants. The design is restrained. The taller buildings, sheathed in limestone, follow the general mode of the 1920's: emphasized verticals, attention to mass and profile and little use of ornament. Since the war two neighboring buildings planned by Carson and Lundin, the Esso Building on 51st Street at the north end of Rockefeller Plaza and the Sinclair Oil Building at 600 Fifth Avenue, have been built in general harmony with the Center.

50 LOBBY, ESSO BUILDING

51st STREET TO 52nd STREET, ROCKEFELLER PLAZA
architects: CARSON & LUNDIN
1947

The lobby of this post-war addition to the Rockefeller Center group is a simple and dignified space expressive of the kind of large-scale business activity concentrated in New York. It is finished in rich materials combined in an unobtrusive color scheme. A dramatic element is the ceiling of wave-shaped coffers housing the indirect lighting system. Although the 51st Street approach is emphasized in the plan, the open 52nd Street entrance is more successful.

51 ST. PATRICK'S CATHEDRAL

FIFTH AVENUE, 50th TO 51st STREETS
architect: JAMES RENWICK
1858-79

The seat of the Archdiocese of the Ecclesiastical Province of New York, this is, as such, a very important building. Also, it was the first major cathedral to be built in the Gothic Revival style but the vitality and freshness shown in some of the earlier, smaller examples of the style had already been lost in the interest of more slavish copying of European precedents. The design of the exterior is meant to be based on Cologne Cathedral, with three deep portals and a steep central gable flanked by towers with traceried spires but, since the vaulting is not of stone, there are no flying buttresses although their pinnacles are present. The total impression is of crudeness rather than the delicacy characteristic of true Gothic.

The interior is richly ornamented and impressive. There are slender, clustered piers of white marble and a profusion of stained glass, much of which was made in France. The unusually high side aisles are surmounted by a triforium and there are shallow chapels off them.

The Lady Chapel and the two smaller chapels adjoining it were not opened until 1906; they were designed by Charles T. Mathews.

52 VILLARD HOUSE

EAST SIDE OF MADISON AVENUE, 50th TO 51st STREETS
architects: McKIM, MEAD & WHITE
1885

A group of mansions arranged around an interior carriage court. They are built of brown sandstone with heavy rustication and other details derived from Italian Renaissance palaces. They are now occupied largely as offices.

53 FINLAND HOUSE

39-41 EAST 50th STREET
architect: AARNE ERVI
associated architects: MAGOON & SALO
1948

A restaurant serving Finnish food and an adjoining shop selling Finnish art and craft products interlocked in a complicated split level scheme. The entire job was fabricated in Finland and shipped in sections, and all furniture, lighting fixtures and fabrics were also imported. It has that quality of warmth and richness frequently achieved by Scandinavian designers using simple but fine materials, varied textures and superb craftsmanship. The dramatic brass lighting fixtures are by Paavo Tynell.

54 LEVER HOUSE

PARK AVENUE, 53rd TO 54th STREETS
architects: SKIDMORE, OWINGS & MERRILL
1950-52

One of the world's largest soap companies in creating a monument for itself in the form of a home for its executive offices, elected to build not the biggest but the most forward-looking and handsome building possible. The result is this elegant structure.

The ground-floor level consists of a lobby entirely glass en-

54. LEVER HOUSE: Midtown Manhattan (Ezra Stoller)

closed, an open colonnade and a landscaped court. The second story, raised on the colonnade, runs around the perimeter of the lot but is open above the court. The third story is nipped in to give separation to the slender tower which seems to float above.

The fully air-conditioned interior is enclosed by fixed windows of heat-resisting glass and spandrels of glass which by day resemble windows. A curtain wall is carried up several story heights above the highest floor to conceal mechanical equipment and roof structures. It is surmounted by a track for a movable scaffolding to permit easy washing of the glass and metal skin.

Lever House makes a telling argument in favor of the kind of freedom encouraged in the new zoning formula now pending which would limit building bulk on the basis of a ratio of floor area rather than by the setback method. Its floor area of six times the lot area compares to Rockefeller Center's twelve, and close to twenty for most large postwar New York office buildings.

55 MUSEUM OF MODERN ART

11 WEST 53rd STREET
architects: PHILIP L. GOODWIN & EDWARD D. STONE
1939

New addition for People's Art Center and Offices
designed by: PHILIP C. JOHNSON
1951 Open weekdays, 12 to 7, Sundays, 1 to 7

This important and active institution in the field of modern fine arts and design is appropriately housed in an outstanding contemporary building. An inviting and pleasantly scaled place, it goes a long way toward eliminating museum fatigue. The ground floor, containing some gallery space as well as entrance lobby, check room and book and print selling facilities, has an exterior of glass and stainless steel. The wall above on the street facade is of white marble, with the second and third floor galleries screened by an expanse of diffusing glass panels in a rectangular grid pattern. The fourth and fifth floor offices are lit by continuous strips of steel windows. Above this is a lounge and roof terrace.

The exhibition areas are designed for the utmost in flexibility with very few fixed walls.

There is a small and acoustically excellent auditorium in the basement where daily film showings are held.

The new portion, a narrow strip adjoining the original building on the west, has a handsome, well articulated facade of black painted steel and glass, not tied in design with the older structure.

56 ROCKEFELLER APARTMENTS

17 WEST 54th STREET AND 24 WEST 55th STREET
architects: HARRISON & FOUILHOUX
1936

The absence of modernistic mannerisms makes these two buildings notable for their time. There are a few semi-circular projecting bays on each of the street facades but otherwise the treatment is simple. The site coverage is less than the maximum allowable, the space between the buildings being used for a garden. The small, luxury apartments are well arranged and have good light and ventilation.

57 AL & DICK'S

151 WEST 54th STREET
architects: GEORGE NEMENY & ABRAHAM GELLER
1948

A striking facade of vertical planks is a fitting introduction to this remodeled steak house, using natural materials. It has a low arched acoustic ceiling (carefully designed to subdue but did not kill the dining room noises), walls of brick, Douglas fir planks and fieldstone. Decorative accents are provided by specially designed brass hanging fixtures and a nicely detailed stair leading to the second floor over-flow dining and private banquet room. See June '52 P/A.

58 HUNT AND WINTERBOTHAM

702 FIFTH AVENUE (55th STREET)
architect: EDWARD D. STONE
1942

The retail shop for a firm importing British woolens for men's clothing, this subdued interior uses the merchandise itself as the main decorative element. On one side the bolts of cloth are displayed on staggered walls of horizontal racks; on the other side they are hung on vertical poles. The back wall is rough brick.

59 LEDERER DE PARIS

711 FIFTH AVENUE (55th STREET)
architects: VICTOR GRUEN & MORRIS KETCHUM, Jr.
1939

An early example of contemporary shop remodeling that is pleasing and restrained in comparison with much recent store work. To achieve an area conducive to leisurely window shopping in the narrow 22 ft. frontage an arcade was used, lined with separate showcases arranged along the walls. Lederer de Paris was described by Talbot Hamlin in August '39 Pencil Points.

The next-door shop, Ciro of Bond Street, done by Morris Ketchum, Jr. in the same year as Lederer, harmonizes in design.

60 FIBERGLAS BUILDING

16 EAST 56th STREET
architects: SKIDMORE, OWINGS & MERRILL
1948

Glass, limestone and aluminum form the new front for this remodeled four-story brownstone which houses sales, display and office space for the Fiberglas Company. The first story and a half (an old mezzanine was removed) comprise the display area, much of it visible from the street through the two-story, 18-foot window. The products of the firm are used wherever possible in the decorative scheme. From an advertising point of view this is certainly an effective alternative to renting expensive space in an anonymous large office building.

61 UNIVERSAL PICTURES BUILDING

PARK AVENUE AND 57th STREET
architects: KAHN & JACOBS
1947

An air-conditioned skyscraper of 21 stories typical in size and character of the larger office buildings constructed in New York since World War II. The elaborate setbacks and unsymmetrical silhouette are a direct reflection of the 1916 zoning laws which relate building heights to street widths.

The normal column spacing of the interior bays is modified on the exterior by the introduction of girders at the second floor level supporting smaller columns more closely spaced. One of these struts occurs between every second window and the alternate mullions are used for heating riser lines. All mullions have

the same outside dimensions and are sheathed alike with stainless steel.

The continuous stone spandrels, uninterrupted by columns, give a strong horizontal emphasis.

62 OFFICES AND SHOWROOMS FOR KNOLL ASSOCIATES, INC.

575 MADISON AVENUE
designed by: FLORENCE KNOLL, Head of Knoll Planning Unit
1951

Showroom open to architects, decorators and their clients; not to the public

This refined and elegant showroom serves as a background for the display of modern furniture designed by contemporary architects and designers. The creation of small areas of interest within the large space of the showroom has been skillfully accomplished.

63 BONNIERS, INC.

MADISON AVENUE AND 58th STREET
designed by: WARNER-LEEDS
1949

An interesting store remodeling to house a Scandinavian publishing company selling home furnishings, gifts and furniture as well as books and periodicals. The two groups of merchandise are handled in separate selling areas, bookshop on ground floor, furnishings above, but these are visually integrated into a single space. This effect is achieved by cutting the second floor back from the two-story plate glass front and piercing it with a large opening at the stair.

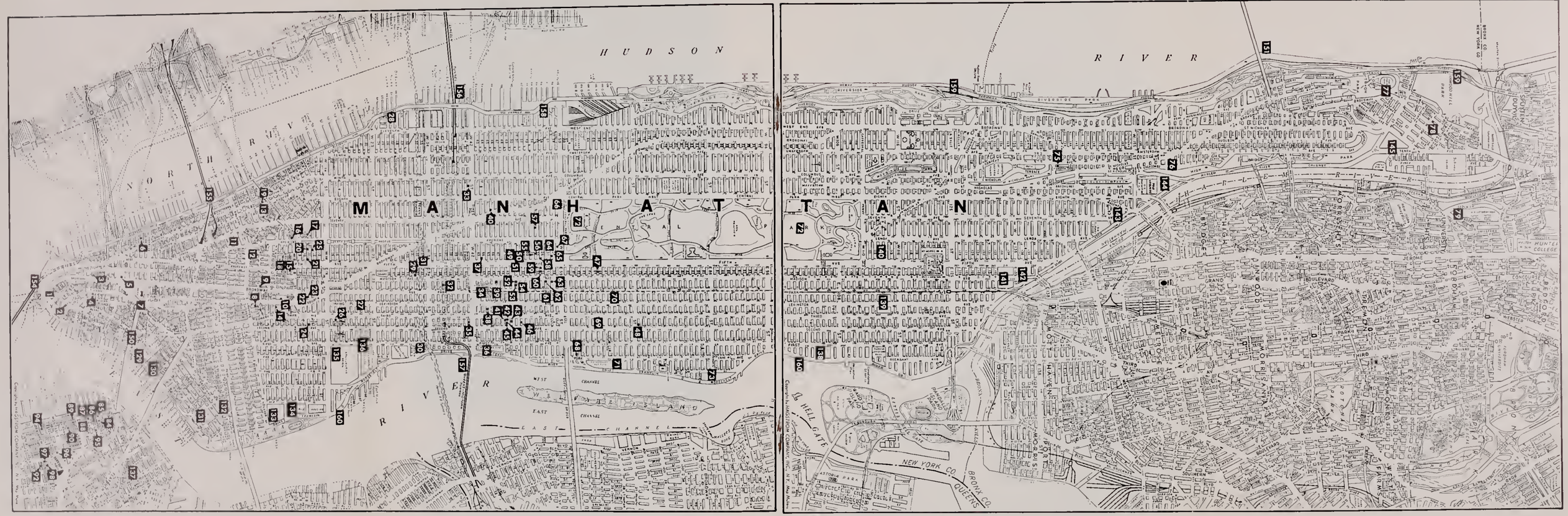
64 PARIS THEATER

4 WEST 58th STREET
designed by: WARNER-LEEDS
1948

Excellent visual and acoustical performance, as well as handsome design, distinguish this movie theater built for the French Pathé syndicate. The auditorium seating 571 people, relies mainly on a soothing color scheme and the interesting shapes derived from the technical requirements for its effect. The floor sweeps down in a hyperbolic curve toward the screen, the curved walls are broken into a series of chords and the ceiling slopes up toward the rear of the balcony. There is a very

63. BONNIER'S: Manhattan - Midtown (Lionel Freedman)

pleasant downstairs lounge equipped for serving coffee and soup for regular performances and holding buffet luncheons for special groups. A glimpse of the lounge is afforded from the street through the glass front of the lobby and the open stairwell. The gay wallpaper in stairwell and lounge is a Steinberg design. The office building in which the theater is located is by Emery Roth & Son.



MAP OF MANHATTAN ISLAND pinpointing architectural highlights described in text

65 PLAZA HOTEL

FIFTH AVENUE, 58th TO 59th STREETS
architect: HENRY HARDENBERGH
1907

An example of the conception of luxury current in the early part of this century. Designed to recall a French Renaissance chateau, the building nevertheless shows a certain consistency of scale and treatment that give it distinction.

66 APARTMENT HOUSE

240 CENTRAL PARK SOUTH
architects: MAYER & WHITTLESEY
1940

In order to provide amenities unusual even in high rental apartments, only 48% of the plot is covered and, above the first floor, the building is actually two independent structures. Thus each apartment has ample light, airiness and ventilation without the use of interior courts. Many of the units have balconies. The extensive view over Central Park has been emphasized while the less attractive outlooks have been minimized. The complicated forms of the building might have been more carefully studied to avoid the awkward, mannered appearance presented.

67 APARTMENT HOUSE

40 CENTRAL PARK SOUTH
architects: MAYER & WHITTLESEY
1941

Smaller and perhaps less significant as a landmark in planning than 240 Central Park South (by the same architects), this building is esthetically more successful. It has a simple facade of white brick with glass railed balconies.

68 CLUBHOUSE — COLONIAL DAMES OF AMERICA

421 EAST 61st STREET
1799

Permission to visit the interior must be obtained in advance from the Colonial Dames

A simple stone building set in a well kept little garden. It was originally the stable on the estate of Colonel William S. Smith, a son-in-law of President John Adams. He lost the property gambling and it is still known as "Smith's Folly." It was used as a residence by one family from 1830 until 1908. In 1924 the Colonial Dames acquired it and made it into a clubhouse furnished in Colonial style.

69 MANHATTAN HOUSE

SECOND TO THIRD AVENUES, 65th TO 66th STREETS
architects: MAYER & WHITTLESEY;
SKIDMORE, OWINGS & MERRILL
1951

Of all the post-war apartment houses and housing projects in the New York area, this 582-apartment, high-rental building is the one achieving greatest distinction as a work of architecture. It was built and is operated by the New York Life Insurance Company as an investment property. One may question the desirability of making any dwelling place so enormous but, given the size, the planning provides considerable livability and the building is very handsome. It forms a spine down the center of a city block with intersecting wings leaving wide, landscaped strips along the north and south sides. By thus maintaining the maximum distance between itself and the surrounding buildings, the apartments receive a greater amount of light and air than is usual in Manhattan and, incidentally, the street scene is improved. Most of the apartments have windows the full width of the living room, large balconies on the higher floors; 95% have through or cross ventilation.

An attempt has been made to alleviate traffic congestion by widening 66th Street to provide a secondary road for passenger cars going to and from the building and providing two off-street delivery areas with large basement receiving rooms on the 65th Street side. There is a garage, accessible from the lobby, under the 65th Street garden with space for approximately 175 cars.

The framing is of reinforced concrete designed to eliminate exposed beams in the ceilings of the main rooms. Exterior walls are a light colored, self-cleaning glazed brick.

70 HUNTER COLLEGE

PARK AVENUE, 68th TO 69th STREETS
architects: SHREVE, LAMB & HARMON;
HARRISON & FOUILHOUX
1940

The first large-scale urban college building of modern design. 5,650 day students and as many evening students must be accommodated in its 19 stories. The exterior is handsome with its limestone walls, steel projected sash and stainless steel trim although some of the detailing seems contrived. The more im-

portant interior areas are decorated in a heavy-handed manner.

71 NEW YORK HOSPITAL AND CORNELL UNIVERSITY MEDICAL COLLEGE

68th TO 71st STREETS AND YORK AVENUE
architects: COOLIDGE, SHEPLEY, BULFINCH & ABBOTT
1932

Some fifteen buildings comprise this large hospital plant occupying more than ten acres along the East River. The buildings are planned as a related group dominated by a twenty six story tower. Despite the vaguely Gothic suggestion of the pointed arches, the white bricks of the exterior walls, the glass enclosed solaria and the pleasant interiors bespeak the new era in hospital planning.

72 CENTRAL PARK

FIFTH AVENUE TO EIGHTH AVENUE, 59th TO 110th STREETS
landscape architects: FREDERICK LAW OLMSTED and CALVERT VAUX
1857

As a result of public interest and agitation in the middle of the Nineteenth Century an area half a mile wide and two and a half miles long in the center of Manhattan was acquired for a public park. Olmsted and Vaux won a competition for the design which follows generally the romantic and naturalistic tradition of landscaping popular at this time. Curving drives wind among rock outcroppings through the irregular terrain. Several lakes have been created. With unusual forsight the designers provided four depressed-grade transverse roads through the park to join east and west sides of the city without permitting that traffic to enter park drives.

MANHATTAN—UPTOWN

73 GRACIE MANSION

IN CARL SCHURZ PARK
EAST END AVENUE AND 88th STREET
1799 Not open to the public

The residence of the mayors of New York City since 1942, this stately white frame house commands a fine view of the East River, Hell Gate and Welfare Island. It is one of the few remaining examples of the fine country houses which once occupied all of upper Manhattan.

74 CATHEDRAL OF ST. JOHN THE DIVINE

AMSTERDAM AVENUE AT 110th STREET
architects: HEINS & LA FARGE (1892-1911)
CRAM & FERGUSON (after 1911)
incomplete

According to its ambitious planners, this was to be the largest church in America. It was begun in a more or less Romanesque style, but after 1911 was carried forward by Cram & Ferguson in "pure Gothic" based on French precedents. The broad nave, 600 feet long, is roofed with high, sexpartite vaulting. Seven chapels in a number of style variations flank the apse.

75 HAMILTON HOUSE — "THE GRANGE"

CONVENT AVENUE AND WEST 141st STREET
architect: JOHN McCOMB
1802 Open Mondays to Fridays, 10 to 5, Saturdays, 10 to 1

Alexander Hamilton's country house has been moved to its present crowded location from a nearby site overlooking the river. Exhibits include furniture of the period and Hamilton memorabilia.

76 JUMEL MANSION

WEST 162nd STREET AND EDGECOMB AVENUE
c. 1765 Open weekdays except Mondays, 11 to 5

An interesting Georgian house, built by Roger Morris, a loyalist who departed for England in 1775. It has important historical associations: Washington made his headquarters here and, following the defeat of the American forces, it served the British command. After passing through various hands, it was purchased and restored in 1810 by a wealthy French merchant, Stephen Jumel.

The wood mansion is sided with flush boards decorated with wood quoins. Slender two-story wood columns support a porch. The detail is typically Georgian, and the furniture includes Georgian pieces and some of Madame Jumel's collection of Empire pieces.

77 THE CLOISTERS

FORT TRYON PARK BETWEEN RIVERSIDE DRIVE AND BROADWAY, SOUTH OF DYCKMAN STREET
architect: CHARLES COLLENS
1938 Open daily, 10 to 5; Sunday, 1 to 5

Beautifully situated on a steep hill overlooking the Hudson, the Palisades and George Washington Bridge, Fort Tryon Park is

76. JUMEL MANSION: Uptown Manhattan (Gottscho-Schleisner)

the site of a fortification of the Revolutionary War. The 62 acres, landscaped by Frederick Law Olmsted, the younger, were given to the city by John D. Dockefeller, Jr., in 1930.

The Cloisters, also Rockefeller-financed, is a branch of the Metropolitan Museum of Art devoted to mediaeval European art. It presents exhibits in an atmosphere approximating that of their original surroundings. The large rambling stone building, built in a style reminiscent of the Romanesque, has incorporated parts of five French cloisters ranging in date from the 12th to the 15th centuries. There is also a chapel from a 12th Century church. Smaller fragments from old buildings such as windows, doorways, columns, and decorative members are incorporated in the structure. Except for the cloisters themselves, the effect is scattered and fragmentary. Nevertheless this is one of the few places in America where one can get some impression of the spirit of mediaeval architecture.

78 DYCKMAN HOUSE
204th STREET AND BROADWAY
1783 Open daily except Mondays, 11 to 5
This farmhouse was rebuilt following the Revolution to replace the original house built in 1748 and burned by the British. The style is typically Dutch Colonial with a low gambrel roof sweeping out to cover porches both front and rear. The lower floor is built of brick and fieldstone and there is a high basement in which the kitchen is located.
Descendants of the original owners presented the house to the City as a museum of early Dutch and English furniture much of which has been contributed by members of the Dyckman family.

THE BRONX

The period of great development in the Bronx began as Manhattan's expansion reached and crossed the Harlem River in the 1870's. The extension of New York's elevated system across the river in the next decade hastened this process. By successive annexations the corporate limits of New York were extended northward into the new territory, then part of Westchester County, and in 1898 upon consolidation of the five boroughs, the area north of the Harlem became a separate borough and county named for the Bronx River, which flows through it.
A number of towns were obliterated by New York's northward surge; Westchester, Kingsbridge, Fordham and Morrisania exist as little more than section names. Of the fine estates which once occupied the area, only the Van Cortlandt and Bartow mansions remain.
Physically the Bronx in its southern areas resembles the congested tenement neighborhoods of upper Manhattan with which it is closely linked. The northern sections follow the suburban pattern of row-houses and detached houses, a pattern which is rapidly changing with the postwar invasion of tall apartment houses, especially in the fashionable Riverdale neighborhood.

79 FORDHAM HILL APARTMENTS
SEDGWICK AVENUE AND FORDHAM ROAD
architects: LEONARD SCHULTZE & ASSOCIATES
1949 Density: 405 persons per acre; Coverage 20.8%
A group of nine identical sixteen-story apartment houses built by the Equitable Life Assurance Society. They are arranged on

the site to provide more garden and playground area than is usual, but without special attention to preferred orientations or to taking full advantage of the fine views. The plans of the 1118 apartments are convenient and spacious; a large expanse of windows in the living and dining spaces is achieved by the use of interior kitchens and bathrooms with mechanical ventilation. The project can be seen from Fort Tryon Park and the Henry Hudson Bridge.

80 POE COTTAGE

KINGSBRIDGE ROAD AND GRAND CONCOURSE
c. 1810

This simple white shingle cottage was the home of Edgar Allen Poe from 1846-49.

81 VAN CORTLANDT MANSION

IN VAN CORTLANDT PARK
NEAR BROADWAY AND 242nd STREET
1747 Open Tuesdays, Wednesdays, Fridays, Saturdays, 10 to 5; Thursdays and Sundays, 12 to 5

A large stone house containing some of the finest Georgian interiors to be found in New York. It is owned by the City and open as a museum exhibiting Colonial and Dutch furniture.

The house has associations with many prominent visitors, among them Washington, who started from here on his triumphant return to the city following its evacuation by the British.

82 BARTOW MANSION

IN PELHAM BAY PARK
architect: R. O. BOLTON
c. 1830 Museum rooms open Tuesday, Friday, Sunday, 1-5

An austere gray stone mansion overlooking Pelham Bay noted for its interiors of the Greek Revival style. This is one of the few country houses of its time remaining in New York.

83 ST. PAUL'S CHURCH

SOUTH COLUMBUS AND SOUTH THIRD AVENUES
1761-65

This church is built of rubble stone trimmed with brick. The spire is of cut stone rather than the painted wood typical of Colonial churches. The building is beautifully kept, and the interior has been restored to its original condition. Stall pews face a pulpit which is located on one of the long sides rather than at the apse

end. Windows have clear glass, not the stained glass which often found its way into Colonial churches in the Nineteenth Century.

St. Paul's, which stands in the midst of a now dilapidated neighborhood, just over the Westchester line, was built to replace an older meeting house on the village green of the town of Eastchester. All traces of this village, other than the church, have vanished.

BROOKLYN

While the Dutch West India Company was establishing a trading post and seat of its colonial government on the tip of Manhattan, Dutch farmers began to settle along the shores of Long Island. Before English seizure of the Colony, towns had been established at widely scattered points throughout the present area of Brooklyn from Jamaica Bay to Wallabout. The principal concentration of population occurred at the ferry landing at the foot of Fulton Street, which eventually merged with the town called Breukelen about a mile inland to form the nucleus of the city to be.

For most of the first two centuries of its settlement this portion of Long Island was an area of quiet farms and scattered villages of strongly Dutch flavor. The introduction of reliable steam ferry service to New York in 1814 began a period of extraordinary growth. When Brooklyn was incorporated as a village in 1816 there was a population of about 4,000; upon consolidation with New York in 1898 the population was close to a million; it now stands at 2,738,000. Absorption of the City of Williamsburg in 1855 had begun a series of annexations which extended the city's limits to include all of Kings County. Industrialization began along the waterfront opposite Manhattan. In 1801 the Navy established a shipbuilding yard at Wallabout Bay, which still flourishes. Development of port and manufacturing facilities extended west and south to Red Hook and Gowanus Bay. Almost from the beginning of its great growth, Brooklyn furnished employment for only part of the people who came there to live. Even before the mid-Nineteenth Century the borough was becoming known as a dormitory for Manhattan.

As the city spread out, the early towns were obliterated by a mass of undifferentiated streets and buildings. Except for an occasional place name, an irregular street or an old house, no vestige remains. The early growth, generally in the northern parts of the borough, is the standard city row house; in the southerly regions, detached houses predominate. Brooklyn Heights, situated on the high ground overlooking the tip of Manhattan and the Upper Bay, became a fashionable residential neighborhood in the early Nineteenth Century and has remained largely intact to this day.

As an amalgam of some twenty-five separate communities, Brooklyn lacks the unified street plan of much of Manhattan. Many gridiron patterns intersect at confusing angles through its 80 square miles. Prospect Park, located on high central ground, is the only sizable public open space in the borough save for the parks along the southern shores. Brooklyn has now developed to the point where it has less unbuilt area than any unit of the city except Manhattan.

HOUSES ON BROOKLYN HEIGHTS

This neighborhood, having remained outside the main stream of great population increases for a relatively long period, has remained intact to a much greater extent than comparable neighborhoods in Manhattan, such as Greenwich Village or Chelsea. It is still largely residential; there are no tenements and very few apartment houses; shops and industry have not intruded. The streets are quiet and tree lined. Many of the private houses have been converted into apartments but external appearance is not much changed. Although there are not many individual buildings of great distinction, the character and residential scale of the neighborhood remain.

Some pleasant streets, worth a visit, that are not mentioned below in reference to specific houses, are Clinton Street, State Street, Sidney Place, Henry Street.

84 24 MIDDAGH STREET, S.E. Corner Willow Street

c. 1800

A painted wood-frame house of small scale, it has an interesting doorway and characteristic dormers. The stable building in the rear has been remodeled as a residence.

85 20-26 WILLOW STREET

c. 1830

This row of four brick houses has been painted gray but the exteriors are otherwise little changed.

86 57 WILLOW STREET

c. 1830

A small-scale brick house with dormers, on a corner lot.

87 70 WILLOW STREET

1829

Unusual in being built on a 50' x 100' lot, this elegant house does not have a typical row-house plan. There is a central curved stair rising through two stories and the interior detail is quite elaborate. A porch runs the full width of the house in the rear. The house was not built all the way to the south lot line; a recent stair tower now fills some of the side yard.

88 104 WILLOW STREET

This is a wood-frame gray shingled house of the pre-Greek Revival period. It has an attractive round-headed doorway but it is impossible to know how much of the detailing is original as the whole facade has been tastefully doctored.

89 118-122 WILLOW STREET

c. 1850

A row of three houses that are the exact equivalent of the standard Classic Revival row house except for their Gothic Revival detailing. They are of brownstone with cast-iron stoop railings and Tudor moldings over the square-headed windows and doors.

90 155-159 WILLOW STREET

c. 1825

A row of three brick houses retaining their original doorways with leaded-glass sidelights and decorated lintels over the windows. An upper story has been added to No. 159 but the other two have their original dormers.

91 131 & 133 HICKS STREET

c. 1850

Another example of Gothic detail applied to the standard row house type, but in this case a very naive translation with low pointed-arch doorways, elaborate cornices, entablatures and cast-iron railings.

92 52 LIVINGSTON STREET
c. 1850
A curious little Gothic Revival house with its original cast-iron balcony, railings and cresting. The top story is a later addition and the windows have been changed.

93 2 & 3 PIERREPONT PLACE
architect: RICHARD UPJOHN
1856-7
These are large, elaborate houses, eclectic Renaissance style, with brownstone fronts and brick sides. In back of them there is an esplanade, built above the Columbia Heights section of the Belt Parkway (an ingenious construction of triple cantilevers superimposed), from which there is an impressive view of New York Harbor and the Lower Manhattan skyline.

94 GRACE CHURCH
HICKS STREET AND GRACE COURT
architect: RICHARD UPJOHN
1847
This Gothic Revival church in a pleasant setting has a well proportioned, attractive exterior but is more noteworthy for its light interior with its delicate, carved wood trusses. The altar, reredos and stained glass above the altar date from 1891. In 1909 the original wood columns were replaced by stone and the entrance rearranged. The tower included in Upjohn's original design has not been built.

95 PLYMOUTH CHURCH OF THE PILGRIMS
ORANGE STREET BETWEEN HICKS AND HENRY STREETS
architect: J. C. WELLS
1847
Henry Ward Beecher was minister of this large church from 1847-87. Its historical importance as a center of abolitionist activity clearly surpasses its architectural interest. It is a severely plain building of the meeting house type, without a tower or steeple. The interior is more pleasing than the severe exterior. The simple rectangular auditorium has plain white walls and a balcony on cast-iron columns.

96 HOLY TRINITY CHURCH
MONTAGUE AND CLINTON STREETS
architect: MINARD LAFEVER
1847
This example of Gothic Revival architecture based on English

precedents is well handled in its over-all forms but is crude in detailing and execution.

97 ST. ANN'S CHURCH
CLINTON AND LIVINGSTON STREETS
architects: RENWICK and SANDS
1869
Not of the quality of Renwick's earlier work, this large, elaborate church has a confused exterior of Italian Gothic motifs. The spacious interior is more successful; cast-iron columns are naively used with wood trusses.

98 PACKER COLLEGIATE INSTITUTE
170 JORALEMON STREET
architect: MINARD LAFEVER
1854
Designed by an architect who was much more at home in the Classic tradition, this Gothic Revival girls' school is of some interest as an example of secular use of the style. It is a small, rather simple building, the side wings of which are later additions.

99 GAGE & TOLLNER'S
374 FULTON STREET
c. 1880
Justly famous for its seafood, steaks and chops, this restaurant still occupies its original premises which have not been altered. The dining room is long and narrow with mirrored side walls framed in cherry. Between the mirrors are panels of carved velvet. Lighting is by fancy cut-glass gaseliers typical of the period.

100 COMMANDANT'S HOUSE, NAVY YARD
attributed to: CHARLES BULFINCH
c. 1810 Write to the Commandant for permission for group visits.
A sizeable wood house, one of the few well-preserved examples in New York of early post-Colonial architecture.

101 ERASMUS HALL HIGH SCHOOL (Old building only)
FLATBUSH AND CHURCH AVENUES
attributed to: PIERRE CHARLES l'ENFANT
1787
This handsome small building of Georgian style housed the first secondary school chartered by New York State. It has for-

tunately survived, completely enclosed in the courtyard of the huge Erasmus High School. The interior has been altered to help serve the present needs of the school.

102 FLATBUSH DUTCH REFORMED CHURCH

FLATBUSH AND CHURCH AVENUES
1796

This church of stone with its slender white painted spire stands on a site occupied by two earlier churches at the center of a village founded in the days of Dutch rule. The painted woodwork and mahogany rails are typical of its period, but the stuccoed exterior, mouldings at the windows and the stained glass are 19th Century additions.

103 FLATLANDS CHURCH

KINGS HIGHWAY NORTH OF FLATBUSH AVENUE
1848

A small, very simple white painted wood church of the New England meeting house type. It has fine proportions and detailing. The original church on this site was built in 1663 and rebuilt in 1794.

104 LUSTBADER HOUSE

220 CORBIN PLACE
architects: BREGER & SALZMAN
1950

A corner city lot 50 by 100 feet is the site of this one-story wood house. Imaginative plot usage and planting has permitted an unusual livability and privacy within the restrictions of the city building and zoning code.

105 FORT HAMILTON VETERANS' HOSPITAL

IN U. S. GOVERNMENT RESERVATION AT
SHORE ROAD AND FORT HAMILTON PARKWAY
architects: SKIDMORE, OWINGS & MERRILL
1950

This handsome, straightforward building of light-colored brick is situated on relatively open land overlooking the ocean to the south. The 17-story main portion of the hospital takes full advantage of this orientation with 95% of the beds getting southern sun and view. Unfortunately, the area between the hospital and the shore drive has been filled with rows of ugly little houses.

The structure is divided into three distinct units with a connect-

ing core of elevators and mechanical services. The hospital section of 1000 beds, mentioned above, has two nursing units of 40 beds each per floor. To the north of this large unit, forming the base of a "T", is a five-story building housing medical services and the out-patient department. A small, low offshoot of the main portion contains the cafeteria, auditorium and religious welfare facilities.

In the July 1952 issue, Progressive Architecture will feature this best hospital of the VA program as a major presentation, covering materials and equipment thoroughly.

FARM HOUSES

A small number of houses of the Dutch Colonial style remain, scattered throughout Brooklyn. With exception of the Lefferts Homestead, they are largely unprotected and subject to alteration or demolition at any time. In the Brooklyn Museum, there are some excellent reconstructions and restorations of portions of such local houses.

106 WYCKOFF-SCHENCK HOUSE

1325 FLUSHING AVENUE

A unique example, in that it is surviving complete with barns and outbuildings in the midst of an industrial area. A present-day Wyckoff sold it to the neighboring factory very recently and it is being used as offices. It is a charming group, in very good condition.

107 LEFFERTS' HOMESTEAD

IN PROSPECT PARK

AT FLATBUSH AVENUE NEAR EMPIRE BOULEVARD

1777 Open Mondays, Wednesdays, Fridays, 1 to 5

A late example of the enduring Dutch Colonial style, this farm house was built to replace an earlier house burned by the British in the Battle of Long Island. It has the familiar dormers and low gambrel roof sweeping out to form a porch roof supported on slender columns. The thin colonnettes and carved sunburst design of the entrance door are New York peculiarities of the late 18th Century.

The interior is furnished with authentic objects of the Dutch period.

The house was moved from its previous location in Flatbush to Prospect Park in 1918 and established as a museum.

107. LEFFERT'S HOMESTEAD: Brooklyn (Brooklyn Museum Collection)

108 DITMAS HOUSE

150 AMERSFORT PLACE
1827

Owned and used by Brooklyn College, this house is in fairly good condition but is not one of the more beautiful examples of the style.

109 BENNET HOMESTEAD

KINGS HIGHWAY AND EAST 22nd STREET
c. 1766

A very attractive house, well maintained, in a pleasant setting with large trees. Typical low-pitched roof, porch and dormers.

110 SCHENCK-CROOKE HOUSE

SOUTH OF AVENUE U BETWEEN
EAST 63rd AND EAST 64th STREETS
c. 1650

This house has been bought by the Brooklyn Museum and will

eventually be moved there, thoroughly restored and set up in the courtyard of the Museum. It has the tiled fireplaces, steep roof, dormers and small scale typical of the early Dutch period.

QUEENS

Situated on Long Island northeast of Brooklyn and directly east of midtown Manhattan is Queens, largest in area and most rapidly growing borough of New York. The expansion which began slowly in the latter half of the Nineteenth Century reached enormous proportions following the completion of the Queensboro Bridge in 1909. Each new extension of transit lines in the following decades opened new lands for speculative development. Characteristically, this development has taken the form of private houses, both of the detached and row types, but, more recently, many apartment houses have appeared. Industrialization has been confined largely to the areas along the East River and Newtown Creek. Queens, like Brooklyn, is principally a residential suburb of Manhattan.

Englishmen figured prominently in the early settlement of Queens under Dutch rule. Nonconformists from New England settled Maspeth, Flushing and Jamaica and established communities based on religious tolerance. These old towns and many new ones which have sprung up in recent times retain more of their independent identity than do those of the other boroughs excepting possibly Richmond. But as the farmlands become "housing estates" and the solidly mapped street pattern is completed, they are being lost.

Queens is relatively well supplied with public open space. There is a number of parks, and the number will be increased when Jamaica Bay is developed for recreational purposes. Rockaway, lying between the bay and the ocean, is a popular beach development. New York's two great airports, LaGuardia Field and the International Airport, are located in the borough.

111 QUEENSVIEW

34th AVENUE AND 21st STREET, LONG ISLAND CITY
architects: BROWN & GUENTHER
1951 Density: About 245 persons per acre; coverage: 13%.

A distinguished group of business and civic leaders sponsored this non-profit cooperative housing project for people of moder-

ate means. Each cooperative owner made an initial investment of several thousand dollars before construction began and must pay modest monthly charges.

Fourteen widely spaced square towers constitute the project. Each has thirteen dwelling floors with four units on each. The original open plan for the ground floor was not carried out; the space on this level has been devoted to doctors' offices and community facilities.

112 SUNNYSIDE GARDENS

SKILLMAN AVENUE TO 39th AVENUE
43rd to 48th STREETS, WOODSIDE
architects: HENRY WRIGHT, CLARENCE S. STEIN, FREDERICK L. ACKERMAN
1924

Sunnyside Gardens is a limited dividend development, built by the City Housing Corporation, intended to provide satisfactory housing for people of modest income. The project is notable for its land use rather than for building design. Its attached houses and apartments, built within standard city blocks, are better provided with garden and recreational facilities than is usual in the city. The result is apparent when these well kept houses are compared with the usual product of the day, often already a potential slum.

These designers and developers were also responsible for Radburn, New Jersey, the town planned for safety and comfort in the day of the automobile. (See also 173.)

113 BOWNE HOUSE

BOWNE STREET AND 37th AVENUE, FLUSHING
1661, additions in 1680, 1696 and 1840.

Open Tuesday, Saturday, Sunday, from 3 to 5

This low, shingled farm house with steeply pitched roof and shed dormers, served for many years as a Quaker meeting place. Its builder, John Bowne, one of the early English settlers in Flushing, was imprisoned for his religious beliefs by the Dutch authorities. His struggle with the Dutch governor and subsequent trial and acquittal in Holland marked an early victory in the struggle for religious tolerance in the Colonies. The house is now open as a museum.

114 QUAKER MEETING HOUSE

NORTHERN BOULEVARD OPPOSITE LINDEN PLACE, FLUSHING
1694

The simple rectangular form, unpainted shingles and steep

hipped roof of this meeting house reflect Quaker plainness and sincerity. This is the oldest religious building on Long Island and, except during the British occupation, has been in continuous use for religious services since its construction.

115 KING MANSION

JAMAICA IN KING PARK, JAMAICA AVENUE AND 153rd STREET
c. 1750 Open Monday, Wednesday, Saturday, 1:30 to 4:30

A large shingled house combining Georgian Colonial and Dutch motifs. The main wing is three stories with a gambrel roof; the two-story wing houses servants' rooms and kitchen.

It was owned by Rufus King, a framer of the Constitution and one of the first Senators from New York.

116 FRESH MEADOWS

SOUTH OF HORACE HARDING BOULEVARD
BETWEEN 186th AND 198th STREETS
architects: VOORHEES, WALKER, FOLEY & SMITH
1949

Human scale and decent land use have been considered in this large investment housing project, in contrast with the elephantiasis common to its type. The development was built by the New York Life Insurance Company on the site of a former golf course. On one hundred and seventy-four gross acres, housing has been provided for 11,000 people, an average density of seventeen families per acre. (A similar project, Metropolitan Life's Parkchester, at a comparable distance from the center of the city houses 42,000 people on one hundred and twenty-nine acres, or ninety families per acre.)

The project seeks to provide a balanced variety of living units in row houses, three-story walk-up apartments and two thirteen-story elevator units. Buildings are arranged informally in small groups with play yards, lawns and benches. Roads are continuous rather than planned on cul-de-sac principles, but effort has been made to limit speeding by frequent turns. Extensive landscaping has been done, and there is a large wooded park. In addition to dwelling facilities there are four parking garages, a nursery school and three shopping centers. The largest of these, designed to serve a broader area than the project itself, includes a department store, movie theater, professional offices and extensive parking. The principal store groups cluster about the intersection of busy Horace Harding Boulevard and 188th

Street and are bisected by the latter. A road and parking lot separate them from much of the residential area.

The buildings are visually unexciting: the effect sought in the housing units is one of complete unobtrusiveness with a suggestion of the 18th Century whereas the shopping groups make concessions to modernism. The principal significance of the project is in its land use and its contribution to the urban pattern. When contrasted to the miles of detached houses bordering the project, the value of this contribution becomes apparent.

RICHMOND

Occupying the whole of Staten Island, Richmond is the most remote and least developed of the five boroughs. The island, which forms the western boundary of New York's harbor, was named by the Dutch colonists in honor of the Staten Generaal, governing body of the Dutch Republic in their day. Early attempts to establish farms on the island suffered from repeated Indian hostility. By the time the English seized the colony permanent settlements had been established by Dutch and Huguenot families, who for many years outnumbered the English in Richmond.

During the first two centuries of settlement, the island grew slowly. Farming and oyster fishing were the principal occupations. In the 18th Century wealthy New Yorkers established their country houses there. Development of the island as a fashionable resort began in the 1830's with establishment of the bathing resorts of Richmond Terrace along the north shore.

After the Civil War rapid industrialization of the New Jersey towns extended to the communities along the north and east shores of Staten Island. The blights of urbanism and suburbanism have since been spreading to embrace most of the island. Cottage communities have appeared on the ocean beaches. Pollution of the surrounding water has stopped all oystering. Farming is little seen now, and scrub growth covers many acres of land plotted in as yet unbuilt streets. Few and scattered remains may still be found of the early settlements, the fine country houses and the fashionable resort community.

Staten Island is reached by ferry from the Battery and from 69th Street, Brooklyn, and by several bridges from New Jersey. The ferry ride from the Battery affords a splendid view of

Upper New York Bay, the tip of Manhattan and the Brooklyn waterfront, and the modern ferry terminal facilities at St. George are interesting.

OLD HOUSES

Surprisingly few old houses remain despite the sparse development of much of the area. Those which have survived are widely scattered, often added to or altered, and generally not open to the public. For avid lovers of the antique, here are the addresses of some of the remaining houses. Most are low-pitched roof dormered-attic houses of rubble stone and frame construction.

117 SCOTT-EDWARDS HOUSE
752 DELAFIELD AVENUE, PORT RICHMOND

118 AUSTEN HOUSE
2 HYLAN BOULEVARD, ROSEBANK
c. 1680

119 STILLWELL-PERINE HOUSE
1476 RICHMOND ROAD, DONGAN HILLS
1680

120 BRITTON COTTAGE
NEW DORP LANE AND CEDAR GROVE AVENUE,
NEW DORP BEACH
c. 1700

121 LAKE-TYSEN HOUSE
630 TYSEN'S LANE, NEW DORP
c. 1670

122 PURDY'S HOTEL
SEQUINE AVENUE AND PURDY PLACE, PRINCE'S BAY
c. 1690

123 SAILORS' SNUG HARBOR
RICHMOND TERRACE, KESSEL AVENUE AND TYSEN STREET
NEW BRIGHTON
architect: MARTIN E. THOMPSON
1831-33 Visitors admitted weekdays 9 to 4

The will of a Captain Randall left his estate of twenty-one acres in the neighborhood of Washington Square and other property

for the maintenance of a home for retired seamen. The home itself was established on Staten Island and is well maintained by income from rental of the Manhattan properties.

The main group consists of a number of adjoining buildings in the Greek Revival style with monumental colonnaded front elevations of gray stone, the other sides being of brick. The character is formal and institutional.

Near Sailors' Snug Harbor are several interesting houses: The Neville House at 806 Richmond Terrace is a two-story whitewashed stone house built in 1770 and formerly serving as a tavern. One block above, on the corner of Tysen and Fillmore Streets, is a handsome colonnaded wood house of the early Nineteenth Century.

124 NEW DORP MORAVIAN CHURCH

TODT HILL ROAD AND RICHMOND ROAD
1762

A simple gambrel-roofed building of residential character, half of which served as church auditorium and half as parsonage. A new church building of country Greek Revival style built in 1844 now serves the congregation, and the earlier building is used as a cemetery office.

125 CHURCH OF ST. ANDREW

NEAR THE JUNCTION OF RICHMOND, RICHMOND HILL AND OLD MILL ROADS, RICHMOND
1872

This Gothic Revival structure set in an old burying ground has the pleasing air of a quiet rural church. The church, built originally in 1712, was twice burned to the walls in the 19th Century and finally reconstructed in its present form.

126 OLD RICHMOND COUNTY COURT HOUSE

CENTER STREET AND COURT PLACE, RICHMOND
1837

The former court house now serves as a community center. Its cut-stone facade and colonnaded porch are typical of the Greek Revival.

Across Center Street is located a building constructed in 1848 to house county offices and now serving as the Staten Island Historical Society Museum. The simplicity of the brick building with white trim is suggestive of Colonial design. The museum is open to the public Sundays from 2 to 6.

128. BILLOP HOUSE: Staten Island (Conference House Association)

127 VORLEEZER'S HOUSE
63 ARTHUR KILL ROAD, RICHMOND
c. 1696 Open daily except Monday, 10 to 5
This two-story frame house was the home of a Dutch minister and school teacher. It has been restored and is maintained as a museum.

128 BILLOP HOUSE (also known as Conference House)
FOOT OF HYLAN BOULEVARD, TOTTENVILLE
1688 Open daily except Monday, 10 to 5
An attractive fieldstone house is well preserved and maintained as a house museum. It is one of the few 17th Century houses of greater than farmhouse pretensions, surviving in the area. The principal rooms are quite large.
The house was the scene of an unsuccessful conference in 1776 between Admiral Lord Howe and an American delegation including Benjamin Franklin, seeking a peaceful settlement of the Revolution.

LARGE-SCALE HOUSING

A conspicuous portion of recent building activity in New York has been devoted to large-scale housing projects. Investing institutions, principally life insurance companies, have been responsible for a substantial amount of this construction, but most of it has been the work of the New York City Housing

Authority. Since its establishment in 1934 the Housing Authority has constructed dwellings for more than 63,000 families in the lower ranges of income and in the process has greatly altered the physical appearance of the city.

There is a marked tendency in recent works of the Authority toward bigger and taller buildings. Early projects often used three and four-story walk-up buildings or six-story elevator buildings with self-service elevators. Buildings of ten to fourteen stories are now appearing frequently, often in combination with lower ones.

Walk-up and six-story buildings generally place three or four apartments about a vertical circulation core in plans based on attached L, T or X shapes. The taller buildings have generally adopted complicated forms and sacrificed through-ventilation in the struggle for maximum elevator efficiency; eight or more apartments per floor are the rule, grouped about a core of two elevators and two stairs. Several two-story projects containing a preponderance of duplex units were built before the war in remote sections of the city, but this type is no longer favored despite its advantages for family living.

In their site usage Housing Authority projects recognize the advantages of large-scale planning. The superblock principle has been adopted with areas equivalent to three or four city blocks usually developed without bisecting streets. Angular placement of buildings and similar planning devices have been tried with widely varying success, in an effort to open vistas within and out of projects and to create pleasant external space relationships. In more recent projects, tower-like buildings of twelve or more stories are spaced widely through the available plot. Little systematic attention is paid to problems of exposure and orientation in any of the projects. A "cross ventilation" requirement (which can be met by having one window per apartment at an angle to the others) has resulted in the broken masses of much city housing.

Small parks or playgrounds maintained by the Park Department adjoin many public housing projects and supplement the spaces provided within the projects for the use of small children and for passive adult recreation. An acre of such playground is generally allotted to serve a project of a thousand families in the heavily populated boroughs. Most projects

provide a children's center for a parent cooperative nursery and some community rooms, usually located in basements. The meager provision of these desirable social facilities is worth noting only in contrast with the extreme poverty of the city in these respects.

Crowding and high land values everywhere apparent in New York have their reflection in public housing. Except in the most remote boroughs, densities range upwards from 175 persons per acre. There is a number of projects in Brooklyn, Manhattan and the Bronx which locate 350 to 425 persons per acre.

Land coverages quite generally range below 20%, due usually to dependence in more recent projects on tall elevator buildings. The social and economic limitations under which public housing is created have often resulted in a standardized drabness in the appearance of these projects, with little attention to creative design.

The large insurance and savings organizations have built in recent years a number of rental housing projects for investment purposes. Legislation making available public funds to assist in the acquisition of sites, provides for condemnation of slum areas for such housing and permits tax benefits for the new projects. With the prominent exception of Metropolitan Life Insurance Company's huge Stuyvesant Town, most of the projects built by the large investors to date have been in the medium or upper rental class and have been developed without public assistance or special taxation benefits.

To provide an economic return on high-priced land, high population densities are the rule. Although the room sizes and arrangements are more adequate than is the case in public housing, the sites are generally more congested. The drab quality often noted in public housing has too often been reproduced in the private developments.

The most noteworthy examples of private enterprise housing have been listed and described for each borough. Three tours are suggested below which may be taken by car. These include a number of public and private housing projects which are described briefly.

(Unless otherwise indicated all projects are developments of the New York City Housing Authority.)

HOUSING TOUR - MANHATTAN DOWNTOWN and BROOKLYN:

129 GOVERNOR SMITH HOUSES

SOUTH STREET TO MADISON STREET
NEW CHAMBERS STREET TO CATHARINE STREET
architects: EGGERS & HIGGINS
1952 Density: 400 persons per acre; Coverage: 15.6%

Sixteen-story double-Y-shaped buildings widely separated give a spacious feeling to the site despite the high density.

130 KNICKERBOCKER VILLAGE

CATHARINE STREET TO MARKET STREET
MONROE STREET TO CHERRY STREET
architect: JOHN S. VAN WART
1934 Density: About 1200 persons per acre; Coverage: About 50%

A densely built walled project which replaces a former slum area. Limited dividend enterprise built it with assistance from the Reconstruction Finance Corporation. Rent levels are above those of public housing.

131 VLADECK HOUSES

WATER STREET TO MADISON STREET
GOUVERNEUR STREET TO JACKSON STREET
architects: SHREVE, LAMB & HARMON;
WILLIAM F. R. BALLARD; SYLVAN BIEN
1940 Density: 322 persons per acre; Coverage: 30.7%

Six-story buildings with long, narrow courts. Trees help to counteract the congested appearance of the site.

132 HILLMAN HOUSES

AMALGAMATED DWELLINGS
GRAND STREET TO BROOME STREET
WILLET STREET TO LEWIS STREET
architects: SPRINGSTEEN & GOLDHAMMER
1930 Density: 376 persons per acre; Coverage: 40%—early bldgs.
Density: 320 persons per acre; Coverage: 21%—later bldgs.

An early consumers' cooperative housing project developed by a labor union with flanking 13-story additions built since the war. Of interest for the nature of the enterprise rather than the architecture.

133 LILLIAN WALD HOUSES

EAST HOUSTON STREET TO EAST 6th STREET
AVENUE D TO FRANKLIN D. ROOSEVELT DRIVE
architects: FREDERICK L. ACKERMAN &
LAFAYETTE A. GOLDSTONE
1949 Density: 426 persons per acre; Coverage: 18.2%

Tall buildings of complex plan varying in height from ten to fourteen stories. Not as open a site plan as adjoining Jacob Riis Houses.

134 JACOB RIIS HOUSES

EAST 6th STREET TO EAST 13th STREET
AVENUE D TO FRANKLIN D. ROOSEVELT DRIVE
architects: JAMES MacKENZIE; SIDNEY L. STRAUSS; WALKER & GILLETTE

1949 Density: 388 persons per acre; Coverage: 19.2%

Public housing, on a site close to Stuyvesant Town, builds a far more pleasant and humane project. Six-story and tall buildings are mixed in a free scheme designed to keep open vistas to the river.

135 STUYVESANT TOWN

EAST 14th STREET TO EAST 20th STREET
FIRST AVENUE TO AVENUE C
FRANKLIN D. ROOSEVELT DRIVE

136 PETER COOPER VILLAGE

EAST 20th STREET TO EAST 23rd STREET
FIRST AVENUE TO FRANKLIN D. ROOSEVELT DRIVE
board of design: GILMORE D. CLARKE, chairman; IRWIN CLAVAN, chief architect

1947 Stuyvesant Town—Density: 390 persons per acre; Coverage: 25%
Peter Cooper—Density: 333 persons per acre; Coverage: 27%

Metropolitan Life Insurance Company's huge investment projects are built to standards which would be intolerable if applied to the rebuilding of all the blighted areas of the city. The tall buildings are so tightly packed on the site that they give the impression of a solid wall thirteen or fifteen stories high.

137 FARRAGUT HOUSES — Brooklyn

YORK STREET TO NASSAU STREET
BRIDGE STREET TO NAVY STREET
architect: FELLHEIMER, WAGNER & VOLLMER

1952 Density: 298 persons per acre; Coverage: 12.2%

Fourteen-story towers of unique design are loosely distributed on a large site. Each building has five wings radiating from the central vertical transportation core, which accommodates ten apartments per floor.

HOUSING TOUR - MANHATTAN UPTOWN

MANHATTAN HOUSE

Insurance company luxury housing. See description 69 in Manhattan section.

138 EAST RIVER HOUSES

FIRST AVENUE TO FRANKLIN D. ROOSEVELT DRIVE
102nd STREET TO 105th STREET
architects: VOORHEES, WALKER, FOLEY & SMITH;
C. W. SCHLUSING; ALFRED E. POOR ASSOCIATES
1941 Density: 322 families per acre; Coverage: 21.9%

A project of mixed six-story and ten or eleven-story buildings placed diagonally on a square site.

139 J. W. JOHNSON HOUSES

EAST 112th STREET TO EAST 115th STREET
PARK AVENUE TO THIRD AVENUE
architects: WHITTLESEY, PRINCE & REILEY
1948 Density: 425 persons per acre; Coverage: 18.9%

Another project of mixed six-story and tall buildings, but placed parallel with the boundary streets. The setbacks seen here are not typical of city housing projects.

140 STEPHEN FOSTER HOUSES

WEST 112th STREET TO WEST 115th STREET
LENOX AVENUE TO FIFTH AVENUE
architect: WILLIAM I. HOHAUSER
1952 (First Section) Density: 378 persons per acre; Coverage: 16.5%

Tall buildings of complex form widely spaced on a site carved from three blocks of city tenements.

141 ABRAHAM LINCOLN HOUSES

EAST 132nd STREET TO EAST 135th STREET
FIFTH AVENUE TO PARK AVENUE, HARLEM RIVER DRIVE
architects: SKIDMORE, OWINGS, MERRILL, TANDY & FORBES
1948 Density: 393 persons per acre; Coverage: 19.3%

Six-story and tall buildings distributed on the site in unrelated angles.

142 RIVERTON HOUSES

135th TO 138th STREETS
FIFTH AVENUE TO HARLEM RIVER
board of design: GILMORE D. CLARKE, chairman;
IRWIN CLAVAN, chief architect
1947 Density: 292 person per acre; Coverage: 24%

An investment project of the Metropolitan Life Insurance Company. Its thirteen-story buildings resemble the tall units of Abraham Lincoln Houses which adjoins it south of 135th Street.

143 HARLEM RIVER HOUSES

WEST 151st STREET TO WEST 153rd STREET
HARLEM RIVER DRIVE
architects: ARCHIBALD M. BROWN; HORACE GINSBERN; CHAS. F. FULLER; RICHARD W. BUCKLEY; JOHN LOUIS WILSON; FRANK J. FOSTER; WILL RICE AMON
1937 Density: 191 persons per acre; Coverage: 27.7%

One of the early Housing Authority projects. Four and five-story walk-ups are used with many building units strung together.

144 COLONIAL PARK HOUSES

HARLEM RIVER DRIVE AND WEST 159th STREET
architects: WHITTLESEY, PRINCE & REILEY
1951 Density: 349 persons per acre; Coverage: 15.1%

A typical recent city project consisting of fourteen-story cruciform towers.

145 DYCKMAN HOUSES

DYCKMAN STREET TO WEST 204th STREET
TENTH AVENUE TO NAGLE AVENUE
architect: WILLIAM F. R. BALLARD
1951 Density: 290 persons per acre; Coverage: 13.1%

Standard slablike buildings, about 250 feet long, arranged at various angles for the sake of openness on a triangular site. Apartments are located on both sides of a central corridor and the offsets in the plan of the building provide corner windows for formal compliance with cross-ventilation requirements.

HOUSING TOUR - QUEENS

146 QUEENBRIDGE HOUSES

41st ROAD TO 40th AVENUE
VERNON BOULEVARD TO 21st STREET
architects: WILLIAM F. R. BALLARD; HENRY S. CHURCHILL; FREDERICK G. FROST; BARNETT C. TURNER
1940 Density: 171 persons per acre; Coverage: 18.19%

A series of Y-shaped six-story building units joined together to present a fairly continuous wall to the outside with internal open spaces. Shopping and social facilities are given more attention here than is usual in later city projects. The planning can be seen from the Queensborough Bridge which borders the project on the south.

147 RAVENSWOOD HOUSES
34th AVENUE TO 36th AVENUE
12th STREET TO 24th STREET
architect: FREDERICK G. FROST
1951 Density: 187 persons per acre; Coverage: 20.8%
Six and seven-story rectangular buildings all similarly oriented with the long faces east or west. The offsets in the long building blocks satisfy the authority's cross-ventilation requirements.

QUEENSVIEW

Queensview is a cooperative housing project just north of Ravenswood Houses. See description 111 in Queens section.

148 ASTORIA HOUSES
SOUTH OF 27th AVENUE BETWEEN 1st AND 8th STREETS
architects: HARRISON & ABRAMOVITZ
1951 Density: 157 persons per acre; Coverage: 12.8%
Cruciform six-story buildings on a fine East River site. Basement social rooms and a marginal playground overlook the water.

149 WOODSIDE HOUSES
49th STREET TO 51st STREET
NEWTOWN ROAD TO 31st AVENUE
architects: VOORHEES, WALKER, FOLEY & SMITH
1949 Density: 218 persons per acre; Coverage: 18.3%
Rather complex groups of six-story building units. The open parapet treatment is one of the infrequent approaches to esthetic experimentation in the highly standardized work of the housing authority.

FRESH MEADOWS

Insurance company housing in a suburban environment. See description 116 in Queens section.

SKYSCRAPER ARCHITECTURE

High buildings rest on two basic developments, the passenger elevator and metal-skeleton construction. In both of these developments important steps have been made by New York inventors and architects.

The first really satisfactory passenger elevator was produced by Elisha Graves Otis of New York, when in 1852 he developed

a safety device for use with the ordinary hoisting platform. Early elevators were cumbersome and depended on steam power. By the early 1870's hydraulic power had been successfully applied and elevators were coming into common use in office buildings. The result was an immediate increase in the useful height of buildings. Even before the appearance of skeleton construction, buildings of sixteen or more stories were constructed with masonry bearing walls. The old Times and Tribune Buildings on Park Row, both built in the Eighties, are examples of such pre-skyscrapers.

Widespread application of electricity to elevators and other mechanical equipment and development of the gearless traction elevator in the early part of this century made possible high speeds and high lifts of the contemporary elevator. Thereafter elevators ceased to set any limitation on building height.

At about the same time that Otis was building a safe passenger elevator, another New Yorker, James Bogardus, developed and patented a system of building in cast iron. Cast iron which had been used for some time for interior columns, came into widespread use for complete external walls. Vast numbers of store and warehouse buildings of this material, dating generally from the period between 1850 and 1880, exist in the wholesale districts below Fourteenth Street. Although Bogardus' patents envisaged a complete building skeleton, the use of cast iron tended to be restricted to the street fronts of buildings, often in imitation of elaborate Renaissance motives which could more cheaply be executed in metal than in stone. The internal construction of these buildings was generally of conventional wood beams and masonry walls.

The significance of cast-iron construction lies in two facts: first, it, like the steel skeleton which followed, was a prefabricated system which was rapidly erected on the site; and second, it permitted maximum openings for admitting light in the upper floors and for show windows and access at street level.

Although Bogardus gave clear indication that he realized that cast-iron construction permitted buildings of a vastly greater height than previously possible, no skyscrapers of this type appeared.

True skeleton construction, in which enclosing walls of masonry as well as floors rest upon a structural framework, was first introduced in Chicago with W. L. Jenney's Home Life Insur-

ance Building in 1884. A change in New York's building code in 1892 permitted widespread adoption of the system, and before the end of the century the city had passed Chicago in the race for height.

New York architects, then under the influence of Hunt's and McKim's Classicism, attempted to design the high building in terms of accepted Classic elements: columns, pilasters, belt courses and cornices. No counterparts appeared of the early work of the Chicago school, such as the Tacoma Building or the Reliance Building. The Classic style, developed essentially for low buildings, presented many difficulties when applied to tall buildings. Eclectic designers began to turn early in the present century to towers of a free Gothic style, of which the Woolworth Building, 233 Broadway (1913), is the most celebrated example. Little question was raised of the difference in purpose between modern American commercial structure and the medieval European buildings which formed the source of the style inspiration. Many other historical periods were combed. As a result of this long search for the proper style for tall buildings and the furious pace of New York building, the skyline presents an incredible catalogue of architectural fantasy; Classic temples, Gothic spires, Renaissance domes and lanterns, Modernistic masts are but a few of the fragments which adorn the tops of skyscrapers.

Following World War I the search continued, but increasing numbers of tall buildings began to appear which were based on no particular historic precedent. Designers concentrated on the composition of the building volumes, usually with emphasized vertical lines and often with modernistic ornament. The second-prizewinning design of Eliel Saarinen in the Chicago Tribune Tower competition had a visible influence in the development of this approach. Raymond Hood, who was co-author of the winning design in Gothic detail, himself turned to this form for some of his later works.

The height and bulk of buildings increased steadily under competitive conditions and the desire to show the last dollar of return from the land. Some architects began early to limit voluntarily the highest portion of the building to a tower occupying only part of the site and to stop the balance of the building at lower levels (Singer Building, 149 Broadway, 1908 and Woolworth Building). But most architects and owners con-

tinued to push buildings to great heights, covering most or all of their plots and darkening the streets below. One of the last of these, the Equitable Building, 120 Broadway, 1915, rises with sheer walls for 38 stories. The 1916 zoning law checked this practice by limiting the height of the building at the street line to a designated multiple of the street width and permitting increased height as the walls stepped back from the property line. On one-quarter of the plot, a tower of unlimited height could be erected. The effect of the law became apparent immediately in the forms of many buildings which completely fill the legally established zoning envelope.

Although the zoning resolution of 1916 checked the most flagrant disregard for decent standards of light and air, it did not limit effectively the amount of office space which a given lot area might carry, hence the congestion in the streets and subways. In the gaudy boom days of the Twenties, buildings were sometimes pushed beyond the limits of economic return. Excessive height means large floor areas unproductively devoted to numerous banks of elevators.

Since World War II, skyscraper designers have increased the emphasis on form and massing of buildings with ornament of any sort rarely seen. In place of emphasized vertical lines previously so popular, alternating horizontal bands of spandrel and ribbon windows are occasionally exploited. Complete walls of insulation-backed metal surfacing are handicapped by code restrictions, but designers are beginning to approach this logical development. Glass has been used for spandrel surfacing in several instances in New York, in order to achieve visual unity of window and wall. Finally, two important buildings, the United Nations Secretariat and Lever House, have recently been completed, in the simple geometrical forms of which may be seen for the first time here a clear embodiment of the design approach of pioneer modern architects. Since neither of these buildings follows the usual practice of filling the zoning envelope, it is problematical what influence they will have on other skyscrapers under the present code.

A new zoning study has recently been completed and a proposal is pending which will limit building bulk by establishing a ratio between floor areas which may be built and the area of the plot. Within certain safeguarding limitations to assure adequate light and air, the architect will, if this new zoning is

adopted, be free to design a building in any form he wishes, up to the limiting floor area, without resorting to costly setbacks.

BRIDGES, TUNNELS and HIGHWAYS

150 BROOKLYN BRIDGE

FROM PARK ROW, MANHATTAN
TO SANDS AND WASHINGTON STREETS, BROOKLYN
designers: JOHN A. ROEBLING &
WASHINGTON A. ROEBLING
1867-83

Brooklyn Bridge is one of the great achievements for the period of economic and industrial expansion immediately following the Civil War. Its designer, John A. Roebling, had many pioneering suspension bridges to his credit, among them the Niagara Falls bridge. Following his death, the work was carried on by his son.

Two granite towers 270 feet high and separated by 1600 feet support the four great catenaries from which is suspended the trussed bridge deck. The deck which formerly carried trolleys and elevated tracks is now being rebuilt for motor vehicles only.

A civic center with park and public buildings is slowly taking shape at the Brooklyn end of the bridge.

The bridge affords a fine view of the Harbor, the East River, and the great congestion of skyscrapers on lower Manhattan. But the bridge itself may be best appreciated from its neighboring East River span, Manhattan Bridge. As an example of the artistic elegance possible in a work of pure engineering, the bridge has had its influence on the development of modern architecture.

151 GEORGE WASHINGTON BRIDGE

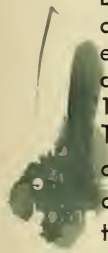
178th STREET, MANHATTAN TO FORT LEE, NEW JERSEY
chief engineer: O. H. AMMANN;
consulting architect: CASS GILBERT
1931

This suspension bridge across the Hudson has a main span of 3,500 feet and carries eight lanes of traffic. Its elegance results from the discipline of the engineering necessity. The stone facing planned for the towers by the architect, was omitted by the engineers.

Elaborate approaches are necessary on both sides of the river

to permit the collection from and distribution to many arteries of the volume of traffic which the bridge is capable of carrying. These include among the New York approaches a vehicular tunnel of one-half mile in length and in New Jersey a complicated system of grade separation intersections.
The Bridge can be seen well from Henry Hudson Parkway and from Fort Tryon Park.

152 BRONX WHITESTONE BRIDGE
EASTERN BOULEVARD, BRONX, TO WHITESTONE, QUEENS
chief engineer: O. H. AMMANN;
engineer of design: ALLSTON DANA;
architect: AYMAR EMBURY, II
1939



This elegant span across the East River links the parkway system on Long Island with the parkways leading to upstate New York and New England. The simplicity of its catenary form, the plain towers sheathed in steel plate and the freedom from extraneous decorative detail make this outstanding among big bridges. Following the failure of the Tacoma Narrows Bridge in Washington, it was considered prudent to stiffen further this bridge deck, so trusses were added above the slim line of the roadway girders.

153 BAYONNE BRIDGE
MORNINGSTAR ROAD AND HOOKER PLACE, PORT RICHMOND
chief engineer: O. H. AMMANN;
consulting architect: CASS GILBERT
1931
A steel arch spanning 1,675 feet with suspended bridge deck. Both the span and the approaches are handled with great clarity. Visible from the ferry to Manhattan.

154 BATTERY-BROOKLYN TUNNEL
under EAST RIVER at BATTERY PARK

155 HOLLAND TUNNEL
under HUDSON RIVER at CANAL STREET 1927

156 LINCOLN TUNNEL
under HUDSON RIVER at 38th STREET 1937 & 1945

157 QUEENS-MIDTOWN TUNNEL
under EAST RIVER at 37th STREET
Each of New York's four vehicular tunnels consists of two tubes, each sufficiently large to carry two traffic lanes, together with

ventilation for the removal of motor fumes, and approaches or plazas to handle the huge traffic which they attract. The problem of approaches has received increasing attention in more recent tunnels and where the tunnel opens onto the city streets large areas have been cleared to permit collection and distribution of cars. The Port of New York Authority has built a block-long bus terminal on 8th Avenue between 40th and 41st Streets which is connected by ramps to the Lincoln Tunnel entrance. Busses from New Jersey use the terminal without using the city streets, and private cars may be parked on the roof.

The Battery-Brooklyn Tunnel is integrated with the City's parkway system and provides a link between Manhattan's West Side Highway and Brooklyn's Belt Parkway.

158 WEST SIDE HIGHWAY

WEST SIDE, SOUTH OF 72nd STREET

An elevated passenger car throughway carried above a broad waterfront street, is an early example of its type. The handling of connecting ramps, curves and traffic lanes is not entirely adequate for the heavy traffic it now carries. The supporting structure and railings are overelaborated with decorative details in structural steel.

159 HENRY HUDSON PARKWAY

WEST SIDE, NORTH OF 72nd STREET

Henry Hudson Parkway continues the West Side Highway north of 72nd Street, carrying six traffic lanes through a park along the banks of the Hudson to the northern end of Manhattan and continuing through the Bronx to connect with the Westchester parkway system. The Parkway affords impressive views of the George Washington Bridge, Hudson River and the Palisades.

160 FRANKLIN D. ROOSEVELT DRIVE

EAST SIDE, ALONG EAST RIVER

The Franklin D. Roosevelt Drive carries passenger traffic along a busy and congested waterfront area of docks and power plants, running in places on filled-in land, under landscaped terraces and through tunnels. Unlike the west side drives, there are a number of street level intersections and stoplights. The drive offers interesting views of the United Nations buildings and passes under the UN grounds.

161 BELT PARKWAY

GOWANUS PARKWAY
BROOKLYN

This circumferential parkway system carries passenger traffic on the west and south sides of Brooklyn and connects with the parkway system of Long Island. A section now under construction will circle Brooklyn Heights to connect with the Brooklyn and Manhattan Bridges and the partially completed major throughway to Queens. The Gowanus Parkway section is carried on a handsome raised steel viaduct above the city streets cantilevered from central supporting piers. The double deck parkway circling Brooklyn Heights is of unique design; the limited space available is skilfully exploited by two cantilevered road decks surmounted by a third cantilevered deck serving as an esplanade and park.

ENVIRONS OF NEW YORK

Many interesting buildings have been built in recent years in the vicinity of New York of which only a few can be noted here. Private residences, which form a large part of the listing, are not shown to the public. Permission to visit can in some cases be arranged through the architects.

162 REID HOUSE

PURCHASE, NEW YORK
architect: EDWARD L. BARNES
1950

The living room and library occupy one wing of this large house, designed for the editor-in-chief of the New York Herald Tribune, and are linked by a stair hall to a two-story north-south wing housing dining, servants, and sleeping rooms.

163 FRIEDMAN HOUSE

USONIA DEVELOPMENT, PLEASANTVILLE, NEW YORK
architect: FRANK LLOYD WRIGHT
1951

Battered stone walls, a circular roof of concrete and a mushrooming circular carport give an extraordinary visual appeal to this house. Most of the neighboring houses in the development are designed by students or followers of Wright.

164 MORRIS HOUSE

WHIPPOORWILL ROAD, ARMONK, NEW YORK
architect: HUSON JACKSON
1949

A one-story house composed of three wings connected in a Y-shape to exploit the limited hilltop site and the fine views.

165 PALLEY HOUSE

CROTON-ON-HUDSON, NEW YORK
architects: SANDERS & MALSIN
1950

A simple one-story house of concrete block built on the bi-unit plan with the dining space occupying the connecting link between living and bedroom elements.

166 JOHNSON HOUSE

PONUS ROAD, NEW CANAAN, CONNECTICUT
architect: PHILIP C. JOHNSON
1949

Two rectangular prisms, one glass-walled, the other of brick, and a Lipschitz sculpture are carefully composed on a grassy shelf. The glass house comprises living, dining and owner's sleeping space; while the almost entirely enclosed brick building houses guest quarters and library. The architect-owner is an outstanding exponent of the design principles of Mies van der Rohe.

167 JOHANSEN HOUSE

PONUS ROAD, NEW CANAAN, CONNECTICUT
architect: JOHN JOHANSEN
1950

A simple raised rectangle contains the living areas of this house and is cantilevered over a lower story containing bedrooms.

168 GELLER HOUSE

LAWRENCE, LONG ISLAND, NEW YORK
architect: MARCEL BREUER
1946

The separate functions of this house are solved in three distinct units: two attached and one independent. The entry occurs at the link between bedroom wing and living-dining wing. A separate related building serves as guest house and car port.

169 SHARP HOUSE
LONG BEACH, LONG ISLAND, NEW YORK
architect: J. STANLEY SHARP of KETCHUM, GINA & SHARP
1947

A small week-end and summer house designed by the architect for himself and his wife. The living areas are on the second floor, raised to provide a dramatic view over the dunes to the sea.

170 JONES BEACH STATE PARK
designed by: HERBERT A. MAGOON, Architect for the Long Island State Park Commission
1933-1934

A public works project of unusual scope, this recreation area consists of an ocean beach over six miles long and many auxiliary facilities. The various elements, including vast parking lots, bath houses, restaurants and playgrounds, are skilfully organized, but the buildings are esthetically unexciting. The park is reached by connecting parkways from the Long Island parkway system.

171 GOODYEAR HOUSE
OLD WESTBURY, LONG ISLAND, NEW YORK
architect: EDWARD D. STONE
1939

A large house which forms a serene background for the owner's fine paintings and sculpture.

172 RADBURN, NEW JERSEY
planned by: CLARENCE S. STEIN & HENRY WRIGHT
consultants: FREDERICK ACKERMAN, THOMAS ADAMS, ROBERT D. KOHN, SIR RAYMOND UNWIN
1929

This planned community is the pioneer example of planning for automobile traffic in a residential community. Two large superblocks are created, into which are carried cul-de-sac streets for access to the houses. Internal parks and walks within the superblock provide pedestrian access to school and shopping center without street crossings.

173 MORRIS PARK HOUSING DEVELOPMENT

MORRISTOWN, NEW JERSEY
architects: GEORGE NEMENY & ABRAHAM W. GELLER
1950

Real estate developments in the New York region rarely show any distinction in design. An exception is this well planned group of low-cost houses built for sale.